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An annotated Checklist of the Italian Butterflies and Skippers (Papilionoidea, Hesperiioidea)

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Table of contents

Abstract

We present here an updated checklist of the Italian butterflies (Lepidoptera: Hesperioidea and Papilionoidea) organised in the following sections (tables):

1. Introduction, providing a broad outline of the paper.
2. Checklist proper, summarised in a table, listing, in separate columns:
    a. Indications of endemicity (sub-endemic, Italian endemic).
    b. The relevant Annex in the Habitats Directive (legally protected species).
    c. Threat levels (in Europe: for threatened species only).
    d. A serial number (whose format is uniform across all Italian animal groups). This number runs throughout all the following tables (see 3, 4).
    e. Name, author, date of publication.
    f. Schematic overall indication of each specie's Italian range (N[orth], S[outh], Si[icily], Sa[rdinia]).
3. Nomenclature, containing basic nomenclatural details for all listed genera, species and some of the generally or historically recognised subspecies and synonyms.
4. Notes, where a variety of other information is provided, on a name by name (family, subfamily, genus, species, subspecies) basis. All remaining doubts as concerns each individual case are clearly stated.

The number of nominal species listed in the previous edition of this checklist, published almost 20 years ago, was 275, whereas it has raised to 290 in the current list. The status of about a dozen of these remains controversial, as discussed in the text. The present checklist is meant to provide an update of the Italian butterfly fauna, taking into account all relevant publications, and tries to explain all nomenclatural changes that had to be introduced, in the appropriate section. Many detailed comments are offered, when necessary or useful, in the notes.

Key words: biodiversity, taxonomy, nomenclature, conservation

Introduction

This Checklist of the Italian butterflies inevitably derives from, and tries to maintain continuity with, the former and much simpler edition which some of us published almost 20 years ago (Balletto *&* Cassulo 1995). Since all checklists of the Italian fauna, listing almost 60,000 nominal species in total, are based on an identical format (Minelli *et al.* 1993–1995), also this new edition retains all the original basic features, even though it is now organised in three main tables, namely:

Checklist at-a-glance, where genera are listed by the original taxonomic order and species alphabetically, apart from a few cases where a name change has occurred with respect to the former edition of this checklist. For each taxon we have maintained i) indications of endemicity; ii) of conservation status iii) a number of order, as a string of 7 (genus group names), or 11 digits (species group names), thereby providing compatibility with the previous edition, as well as for insertions or deletions becoming necessary along time. The same numerical order is maintained throughout the tables; iv) name authorship/date of publication and v) Italian general distribution, indicated by the acronyms N [orth Italy], S [outh Italy, comprised central Italy], Si [cily], Sa [rdinia] (Balletto *&* Cassulo, 1995).

Nomenclature, where all nomenclatural details of each name are provided. Many more names are listed in this

table than in the checklist table, since we have included here some of the synonyms historically most frequently cited in the Italian and/or European literature. The rank of taxa is shown by indentation, while the names' status of nomenclatural availability (bold), or un-availability (plain) is shown by type of character.

Notes, where many other explanations are provided, to allow full understanding of the preceding sessions.

A new feature of this edition is that we have listed the true Italian endemic species separately from "sub-endemics". The reason for this is that some Italian endemics have much broader ranges that some non-endemic species (which we call sub-endemic), whose distribution narrowly spans across the political borders. This is the case, for instance, for some Alpine *Erebia* species, such as *E. christi*, which occurs in 4 10x10 UTM quadrats, 2 of which are in Italy and 2 in Switzerland, *E. scipio* or *E. aethiopellus* (Italy and France), as well as for some "Tyrrhenian" species only ranging in some parts of Sardinia and Corsica, etc. Of 290 nominal species occurring in Italy, 17 (6.0%) are Italian endemics and 20 (7.1%) have very restricted ranges (sub-endemic). The combined endemicity level is of 13.1% (37 species).

One can argue that our way of listing butterfly ranges on the Italian territory is rather too general, but it is to be kept in mind that distributional data are accessible at much finer scale (10 x10 km) in Balletto *et al.* (2007) and although the latter paper contains some punctual errors, we are trying to keep this information continuously revised and updated. As concerns the fine scale geographic distribution of butterflies, however, our information is much sketchier than is available for some other parts of Europe, so that a huge amount of work should be completed before our data will achieve the predictive value that is necessary to face current environmental challenges. No extensive monitoring activity has been undertaken, as yet, to meet BCE's (Butterfly Conservation Europe) requirements and, even within most of the SCIs created to meet the provisions of the EU Habitats Directive, monitoring activities are lagging. Many efforts have been made, however, to pinpoint populations known for having become extinct sometime in the past (Bonelli *et al.* 2011).

This paper should probably be seen more as a nomenclatural revision of the Italian butterfly fauna than simply as a taxonomic update. To clarify a number of more or less difficult issues, particularly to the advantage of those entomologists who are not fully familiar with the "Code", we have decided to accompany this new edition of the checklist of Italian butterflies with a much larger set of notes than in the previous edition. Depending on cases, these notes deal with the taxonomy, or with some particular aspects of the nomenclature, of each taxon, while basic nomenclatural details are incorporated in the Nomenclature table.

It will be apparent to the reader that the International Commission on Zoological Nomenclature (ICZN) has done much invaluable work to make the nomenclature of this intensively studied group of insects as stable as humanly possible. As many as 41 Opinions and at least 3 Directions, having important nomenclatural consequences for over 200 names used to identify Italian butterflies, have been rendered by the Commission along the years. Yet, in the process of drawing this checklist, we have observed that some names were still in need of nomenclatural clarification, which prompted us to submit three new applications to the ICZN, as detailed in the notes. To make the process clearer for those who are not fully acquainted with the intricacies of the Code, we have listed synonyms most frequently observed in the literature, with particular reference to the "historical" books and papers by Scopoli (1763), Allioni (1766), Petagna (1786), Cyrillo (1787), Rossi (1790, 1807), de Prunner (1798), de Loche (1801), Bonelli (1826), O. Costa (1828–1840), Gené (1839), Ghiliani (1842–1877), Bertoloni (1844), Stefanelli (1869, 1901), Franceschini (1879), Sordelli (1885), Curò (1885), Gianelli (1890), Griffini (1895), Mantero (1912), Senna (1912), Marchi (1910), Turati (1879–1933), Mariani (1930–1957), Verity (1903–1958) just to cite those subjectively the most important, either "scientific" or sometimes popular, dealing with the Italian fauna. We have only avoided listing some too long-disregarded junior synonyms, such as some of those mentioned by Giorna (1791), or de Prunner (1798). In each case we have tried to explain why all these nomenclatural changes were needed.

Synonyms have been listed in such a way as to make clear to the reader whether they are subjectively "available" to designate species-group or genus-group taxa (bold characters), or objectively unavailable (plain) for nomenclatural purposes.

For each of the listed names, we have carefully checked the original publication as concerns the spelling, original combination and type locality (for species group names), or the type species (for genus group names). Although, for the latter analysis, works by Hemming (1967) and Bridges (1988), have proved invaluable in pointing out many possible difficulties, we always referred to the original sources, comprised the many decisions made by the ICZN to resolve the most complex issues, since errors are probably inevitable.

Finally, since characters drawn from larval morphology are playing an increasingly important role in the definition of species limits, we have also listed publications where these issues are discussed in relation with the taxonomy or the biology of Italian butterfly species, generally in their relationships with those from other parts of Europe. We have followed a similar procedure as concerns phylogenetic reconstructions, based on morphological and/or molecular analyses.

Italian butterflies: the state of the art

Since the early times of European Lepidopterology, and even before Linné's seminal work, the very rich and diverse Italian butterfly fauna has raised considerable interest by amateur and professional entomologists alike. Yet, a good deal of new information has kept accumulating, even during the past several years.

The previous edition of this Checklist listed 275 species, while in the current edition the number of Italian butterflies has risen to at least 290. Around a dozen species, all listed in both editions, remain controversial. Among these, it is worth mentioning taxa included in the complexes of *Pyrgus alveus* and of *P. foulquieri*, *Spialia therapne*, those of the *Lycaena hippothoe* group, one or two *Lycaeides*, two or three *Polyommatus* (subgenus *Agrodiaetus*), as well as taxa of the *Euphydryas aurinia* complex. Reasons for the choices we have made are detailed in the notes.
To come to the "new" species, a really peculiar case concerns the recent discovery of some whose presence on Italian territory was previously overlooked. *Euphydryas maturna*, a Habitats Directive species (!) was demonstrated to occur at a very small site in the Italian S.W. Alps. Its presence in the area had been reported as early as in the late 18th Century (de Prunner 1798), but only by Rocci (1911) in relatively more recent times. No one, however, really seemed to trust these records, until the species was rediscovered, and very unexpectedly so, by Gallo & Gianti (2003). Another, but totally "new" finding relates to *Callophrys avis* (Bonifacino *et al.* 2009), again in N.W. Italy (W. Liguria), from an area not even very close to the French border. Even though Verity (1943) had hypothesised that this species might one day be found to occur in Italy, no one had ever reported a single specimen from the Italian political territory. *Azanus ubaldus*, a Paleotropical species having presumably spread from N. Africa, has been observed for the first time on the Isle of Lampedusa in 2010 (Caporale & Guidi 2013.

Yet another and sometimes more difficult issue is raised by recent proposals for the splitting of several "species", either as a consequence of a combination of new and more detailed morpho-anatomical, biological (i.e. *Zerynthia polyxena-Z. cassandra*, *Polyommatus icarus-P. celinus*, *Melitaea phoebe-M. ornata*, *Melitaea athalia-M. nevadensis, Coenonympha pamphilus-C. lyllus*), or molecular investigations (i.e. *Coenonympha darwiniana-C. macromma-C. gardetta-C. arcania* and *Leptidea sinapis-L. reali-L. juvernica*). Doubts may still be raised as concerns the taxonomic status of some of these and other taxa, such as, for instance in the case of *Hipparchia genava*, which may or may not by a separate species from *H. hermione*. The presence in Italy of the latter taxon (if at all separate) is also doubtful, as it might occur in the extreme N.W. of the Country (W. Liguria), but data are uncertain, since this region, together with some adjoining French territories, may be part of a rather broad and ill-defined hybridisation area between the two. We have dealt with all these issues in the relevant "Notes" section of this checklist.

In relatively few additional cases, the increase in the numbers of our butterfly species has been a result of the natural range expansion of some tropical species, perhaps as a consequence of current climate changes. This may be the case for *Danaus chrysippus* (already listed in the former edition), as well as for *Zizeeria karsandra* and for *Azanus ubaldus*.

Finally, *Cacyreus marshalli* is an alien species, accidentally introduced into S. Europe in the end of the last Century (first reported as established on Mallorca in 1990), which managed to quickly spread to the Iberian Peninsula and eastwards all across the N. Mediterranean, to reach Greece in 2010 (Martinou *et al.* 2011). In Italy *C. marshalli* was first observed in Rome (1996—Trematerra *et al.* 1997) and quickly spread, either by repeated incidental introductions or by active flight, to most other regions. It currently occurs all over the Country (Quacchia *et al.* 2008).

A final issue we wish to address here is that the larval food-plants consumed by our butterflies on the Italian territory have remained almost unknown for quite a long time, as well as their larval developments, since authors tended to refer to information deriving from other European countries, mainly from Germany, the UK or, sometimes, France. In more recent times, however, several valuable attempts to meet this lack of information have been made, such as those by Bolognesi (1999), and particularly by Villa *et al.* (2009) and by David Jutzeler (see to the "Notes" section).

Some general nomenclatural issues

While taxonomy is in a perpetual state of flux, driven by the continuous advancement of investigation methods and changes in species concepts, nomenclature would be expected to remain relatively stable. Nomenclatural instability, however, is more common than might be expected and frequently represents a difficult issue in animal taxonomy. As a consequence, some species are listed, in this edition of the Italian checklist, under different names, authorships, or dates, with respect to the former edition.

Sometimes this may be a partial and surely unwanted consequence of the slow, but continuous, evolution of the International Code of Zoological Nomenclature (ICZN 1999). Some of the decisions made by the International Commission are subjectively disputable, but every taxonomist should bear in mind that the ICZN is the focal and only reference for proposing new, or reviving old, binomial combinations. It is not by infringing the rules that one can promote a better Code, nor such an action will ever contribute to a more stable nomenclature. Entomologists, however, have not always been blameless, in their respect for the Code. A common error is that species-group names ending in a Latin or Latinized adjective (or participle) in the nominative singular are not always made to agree in gender with the generic name with which they are combined, as requested by Art. 31.2. Contending that leaving the ending of the species name as it was originally published makes their electronic retrieval easier is untenable, in the face of current technology. In other cases, authors seem to forget that some names are included in the "Official List and Index of Works in Zoology" (see Melville *&* Smith 1987) and/or in the "Official list of Names in Zoology" (ICZN 2012).

Dates of publication found in the current lepidopterological literature are often mistaken and this was unfortunately a frequent case also in the first edition of our Italian checklist. We have now strictly adhered to Hemming (1937), as concerns Hübner's names, to Heppner (1981) for Esper's names, as well as to Heppner (1982) in the case of several other authors such as Herrich-Schäffer etc, just to cite some of the most important.

Taxonomy

Starting with the second part of the 1990s, European authors directly or indirectly dealing with butterfly ecology or taxonomy have generally made reference to the checklists published by Higgins & Riley (1975 and later editions), Kudrna (1990), Karsholt & Razowski (1996), Tolman & Lewington (1997, 2008) or, as concerns Italy, to Balletto & Cassulo (1995). The Red List of European Butterflies (Van Swaay *et al.* 2010) and the Distribution Atlas of Butterflies in Europe (Kudrna *et al.* 2012) have become available in more recent times.

With the ever increasing availability of internet connection, a number of Museums and private networks have started producing updated zoological catalogues, often funded by the European Union and/or other corporate organisations. As concerns butterflies, the most important of these databases are those of PESI (Pan-European Species directories Infrastructure, see http://www.eu-nomen.eu/portal/), Fauna Europaea (see http://www.faunaeur.org) and Funet (see http://www.nic.funet.fi/pub/sci/bio/life/insecta/lepidoptera/).

Although trying to obtain a "common consensus" taxonomy of the European butterflies would be desirable, we are still far from reaching this goal, since the authors of the above cited lists and databases might not have made enough efforts in this direction, or even less so in trying to obtain congruence with the "official" N. American and/or S. American databases (Lamas 2008: http://www.ucl.ac.uk/taxome/gbn/; Pelham 2012 http://butterfliesofamerica.com/US-Can-Cat.htm). Each of above cited lists directly or indirectly proclaims itself to be the most authoritative and each follows its own more or less separate taxonomy.

A notable exception, as concerns institutional co-operation, is represented by the Species 2000 and ITIS Catalogue of Life initiative. Two independent organisations, i.e. the Species 2000 (an international federation of world taxonomists) and the Integrated Taxonomic Information System (ITIS based in the US and Mexico) decided in 2001 to work together to build a comprehensive catalogue of all known species of organisms on Earth, known as "Catalogue of Life", which in the case of butterflies, is available at the site http://www.catalogueoflife.org/annual-checklist/2012/browse/classification/kingdom/Animalia/phylum/Arthropoda/class/Insecta/order/Lepidoptera/superfamily/Papilionoidea/. Taxon by taxon, Catalogue of Life makes also reference to a large number of continuously updated databases, such as, for butterflies GloBIS (GART: Global Butterfly Information System) (currently listing only the Papilionidae and Pieridae) and LepIndex (The Global

Lepidoptera Names Index). To all of these supplementary databases it provides the relevant links (see also Häuser *et al.* 2005). Finally, Global Biodiversity Information Facility (Gbif) (see: http://data.gbif.org/search/) and U Bio portal (see http://portal.ubio.org/index.php?) provide access to this complexity of sites.

Even in the latter case, and irrespectively of the valuable co-ordination efforts undertaken, several discrepancies exist between the American and the several European checklists and even among the various interconnected databases.

Discrepancies are probably inevitable, since they derive from the taxonomic philosophy of the authors involved in drawing each list. One can argue about the merits of large genera vs. small genera, many subspecies vs. few subspecies or no subspecies at all, etc. Each branch and sub-branch of zoological research, however, has developed its own tendency, in these respects. The main problem is that reasons for choosing one rather than another taxonomic arrangement are virtually never explained in full, so that the non-specialist reader is left to decide which list he likes better, or which genus name seems to have a better sound, while ecologists, conservationists, or students of animal behaviour will normally refer to "tradition" in their own discipline.

We will discuss discrepancies among currently available classifications in the relevant notes to this checklist, as well as we will try to analyse them and will explain reasons for the choices we have made.

Apart from a few individual cases among the Hesperiidae and Pieridae, however, the genus-level taxonomy of European butterflies has been relatively stable all along the past several decades. Some discrepancies have arisen only in recent times, for instance in the case of Nymphalids, mainly as a consequence of current molecular studies. The generic arrangement of Lycaenids is among the most controversial, particularly as concerns the Polyommatina and the *Polyommatus* group of genera.

We have made explicit in the relevant notes all current taxonomic difficulties, as well as all reasons for our taxonomic treatment, for which we take full responsibility.

The nomenclature of the genitalic parts mentioned in the notes follows de Jong (1972, for *Pyrgus*), Chapman (1916), Nabokov (1944, 1949) and Eliot (1973), for the Polyommatina, or Higgins (1975), for other taxa.

At species level, we have maintained the same philosophy characterising the former edition of this Checklist, since we did not directly recognise the subspecies rank. This treatment parallels what is the rule for most animal groups, since in zoological lists "if you have three names, you are either a butterfly or a bird" (or perhaps a Carabid beetle). Some authors seem to use subspecies as a proxy for phylogeny, which is much better depicted as a tree, at least whenever possible.

The point is that the subspecies rank has no biological basis and results of recent molecular work concur with those from other sources in demonstrating that species do indeed hybridise with each other in nature, so that a 2–3%, or even higher, hybridisation rate is normal between related species, there where they meet together. Judgements on the hybridisation potential of broadly allopatric taxa are part of highly philosophical speculations, upon which we are not going here to dwell. At a time in the history of biological thought when species can only (at best) be defined as segments in an evolutionary tree (see Hausdorf 2011, Frankham et al. 2012 etc.) and when criteria based on genetic divergence, such as the "barcoding gap", have demonstrated to be unable to represent a meter of speciation events, (the full genomes of man and chimpanzee only diverge by 1.53%) how can we define subspecies? Unnamed Evolutionarily Significant Units (ESUs) are indeed much better than subspecies for defining relevant segments of evolutionary trees, as well as for Conservation related purposes (see Casacci et al. 2013 for a review). At any rate, and to meet the expectations of those who might not share our point of view, we have separately discussed in the notes table those cases where a different approach from ours is subjectively possible.

A particular situation, in this respect, is offered by taxa which, while remaining fully separate and distinct over the largest part of their ranges, form relatively narrow hybridisation belts (or suture zones of hybrid interaction) there where they come in reciprocal, secondary, contact. The scientific literature over this topic numbers in the thousands of papers (almost 150 in the first part of the year 2013 taken alone. Source: Web of Science) and is central to many studies on speciation mechanisms. To come more specifically to butterflies, hybrids may be morphologically intermediate (wings: *Euchloe crameri* / *E. ausonia*, genitalia: *Zerynthia polyxena-Z. cassandra*; *Melitaea athalia* / *M. nevadensis*) between the parent species or, more often, can be demonstrated only by molecular markers (*Pieris daplidice* / *P. edusa*). In other similar cases, hybridisation (recent or past) may have occurred in spots (*Pieris napi* / *P. bryoniae*, *Lycaena tityrus* / *L. subalpina*, *Euphydryas aurinia* / *E. glaciegenita*), or in broader areas (*Melitaea athalia* / *M. nevadensis*). Yet in other cases, hybridisation having occurred in the more or less distant past may have generated fully separate "new" taxa (*C. darwiniana*: between *Coenonympha*

arcania / *C. gardetta* and perhaps *C. macromma*). In many cases hybridisation occurs between sister taxa, but secondary-contact hybridisation may happen also between relatively distant species (*Melitaea athalia* / *M. nevadensis*), which might not be expected to develop this kind of interaction.

As concerns butterflies, hybridisation belts occur, in Italy, mainly in the SW part of the Padano Plains, or along the southern slopes of the Alps.

All of this is of course a consequence of evolution, which, like any other biological process, knows no strict rules, and where adaptation plays an important role. From a taxonomist's point of view, however, processes such as those that we have briefly mentioned generate a number of grey areas, ranging over a continuum of slightly different situations, so that each taxonomist will make a subjective use of terms such as "subspecies", "semispecies" or, perhaps more simply, just "species", depending on situations and individual judgement. Although this obviously represents an oversimplification (see Abbott *et al.* 2013), we have taken the latter of these options, following in this the position of many evolutionary biologists, starting with Remington (1968, 1985); Harrison (1990, 1998); Gompert *et al.* (2012); Nachman & Payseur (2012) etc (see Descimon & Mallet, 2009 for a different opinion and Nadeau *et al.* 2012 for a review of the genomics of speciation concepts).

As concerns the Family-level taxonomy we have followed van Nieukerken *et al.* (2011), Ackery *et al.* (1999) and Scoble (2002).

Conservation

To come to the conservationist perspective, it is well known that many butterfly species are threatened, worldwide, mainly as a consequence of habitat destruction (Balletto *&* Casale 1991; Bonelli *et al.* 2011) and that many more will probably become threatened in the near future, if current ecological trends are maintained (Balletto 2007; Settele *et al.* 2009).

As in the former edition of this work, we have included a column in the checklist table indicating the conservation status of species deemed to be threatened, ranked as either critically endangered (CR), endangered (EN), vulnerable (VU), or near threatened (NT). In the current checklist, however, we listed threats as they were evaluated at European level (see Van Swaay *et al.* 2010), by following the IUCN method, so that results slightly differ from those previously obtained by other methods by Balletto & Kudrna (1985) and Balletto & Cassulo (1995). Of 290 Italian butterflies, 35 are threatened or near threatened (NT) at European level, while 16 species are listed in the annexes of the Habitats Directive. Since all these species have been evaluated on a Europe-wide perspective, results do not necessarily reflect the Italian situation. Gaining full understanding of threats at European level is, however, important, since the realisation of having still viable populations of a globally threatened species should generate perception of national responsibilities. The Italian populations of *Coenonympha oedippus*, for instance, represent a quite sizable proportion of the whole European population of this species and this ought to be kept in mind, particularly since it occupies a highly anthropic area, such as the Padano plains.

The need of gaining a more exact understanding of the conservation status of our butterflies was stressed by the Italian Zoological Union already at least in 2006 and a first draft of the national Red List was transmitted in due time to the Italian Ministry for the Environment. Since these evaluations have not yet been cleared for publication, they will be incorporated in a separate paper.

Italian biodiversity "hotspots" have been investigated by Balletto *et al.* (2010a), whereas the most important areas, as concerns butterflies' conservation, or "Prime Butterfly Areas" have been listed in Balletto *et al.* (2003) and more recently in van Swaay *et al.* (2010).

As concerns the Italian butterflies in particular, only one species, *Lycaena helle*, may have become extinct in the early 1900s (Meyer 1981, Bonelli *et al.* 2011).

Species occurring from the sea-level up to the tree-line, and most particularly those occupying in the Padano-Venetian plains, are among the most fragile, because threats generated by the natural reforestation in the mountainous part of the area after the abandonment of agriculture, are compounded by those derived by human activities, such as habitat destruction, or the ever sinking water table, in the plains (Balletto *et al.* 2005, Balletto 2007).

For each of these species, together with those listed as threatened in the European Habitats Directive, the Ministry for the Environment, acting in co-operation with the involved Regions, is expected to develop and enforce a series of suitable Action Plans on a case-by-case basis, in the near future.

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Literature

(Introduction only. The more specific literature is listed, case by case, in the Nomenclature and in the Notes tables accompanying this work).

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Family or Subfamily name	Endemic or sub-endemic species	Italian endemic species	Habitats Directive (43/92/CEE)	Threatened in Europe (min NT)	Taxon (Superfamily) number (Italian Checklist)	Genus number (Italian Checklist)	Specie number (Italian Checklist)	Genus name	Species name	Authorship	N	S	Si	Sa
HESPERIIOIDEA														
HESPERIIDAE														
PYRGINAE														
					089.	001.0.		**Pyrgus Hübner, [1819]**						
					089.	001.0.	001.0		**accretus ***	(Verity, 1925)	N			
					089.	001.0.	002.0		**alveus**	(Hübner, 1803)	N			
					089.	001.0.	003.0		**andromedae**	(Wallengren, 1853)	N			
					089.	001.0.	004.0		**armoricanus**	(Oberthür, 1910)	N	S	Si	Sa
					089.	001.0.	005.0		**cacaliae**	(Rambur, [1839])	N			
					089.	001.0.	006.0		**carlinae**	(Rambur, [1839])	N			
					089.	001.0.	007.0		**carthami**	(Hübner, [1813])	N	S		
	E				089.	001.0.	008.0		**centralitaliae ***	(Verity, 1920)		S		
				VU	089.	001.0.	009.0		**cirsii**	(Rambur, [1839])	N			
					089.	001.0.	010.0		**foulquieri**	(Oberthür, 1910)	N			
					089.	001.0.	011.0		**malvae**	(Linné, 1758)	N			
					089.	001.0.	012.0		**malvoides**	(Elwes & Edwards, 1897)	N	S	Si	
					089.	001.0.	013.0		**onopordi**	(Rambur, [1839])	N	S		
	E				089.	001.0.	014.0		**picenus ***	(Verity, 1920)		S		
					089.	001.0.	015.0		**serratulae**	(Rambur, [1839])	N	S		
					089.	001.0.	016.0		**sidae**	(Esper, [1784])	N	S		
					089.	001.0.	017.0		**warrenensis**	(Verity, 1928)	N			
					089.	002.0.		**Spialia Swinhoe, [1912]**						
					089.	002.0.	001.0		**orbifera**	(Hübner, [1823])			Si	
					089.	002.0.	002.0		**sertorius**	(Hoffmansegg, 1804)	N	S		

SE		089.	002.0.	003.0	**therapne**	(Rambur, 1832)					Sa
		089.	003.0.		**Carcharodus Hübner, [1819]**						
		089.	003.0.	001.0	**alceae**	(Esper, [1780])	N	S	Si	Sa
		089.	003.0.	002.0	**baeticus**	(Rambur, [1839])	N	S	Si	
	NT	089.	003.0.	003.0	**floccifer** •	(Zeller, 1847)	N	S	Si	Sa
	NT	089.	003.0.	004.0	**lavatherae**	(Esper, [1783])	N	S		
		089.	004.0.		**Sloperia Tutt, [1906]**						
		089.	004.0.	001.0	**proto** *	(Ochsenheimer, 1808)		S	Si		
		089.	005.0.		**Erynnis Schrank, 1801**						
		089.	005.0.	001.0	**tages**	(Linné, 1758)	N	S			
HETEROPTERINAE											
		089.	006.0.		**Heteropterus Duméril, 1805**						
		089.	006.0.	001.0	**morpheus**	(Pallas, 1771)	N	S			
HESPERIINAE											
		089.	007.0.		**Carterocephalus Lederer, [1853]**						
		089.	007.0.	001.0	**palaemon**	(Pallas, 1771)	N				
		089.	008.0.		**Thymelicus Hübner, [1819]**						
	NT	089.	008.0.	001.0	**acteon**	(Rottemburg, 1775)	N	S	Si		
		089.	008.0.	002.0	**sylvestris** ▪	(Poda, 1761)	N	S	Si		
		089.	008.0.	003.0	**lineola**	(Ochsenheimer, [1808])	N	S	Si		
		089.	009.0.		**Hesperia Fabricius, 1793**						
		089.	009.0.	001.0	**comma**	(Linné, 1758)	N	S	Si		
		089.	010.0.		**Ochlodes Scudder, 1872**						
		089.	010.0.	001.0	**sylvanus** ▪	(Esper, [1777])	N	S	Si		
		089.	011.0.		**Gegenes Hübner, [1819]**						
		089.	011.0.	001.0	**nostrodamus**	(Fabricius, 1793)	N	S	Si		
		089.	011.0.	002.0	**pumilio**	(Hoffmansegg, 1804)	N	S	Si		Sa

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PAPILIONINAE

			089.	012.0.		**Papilio Linné, 1758**						
	IV		089.	012.0.	001.0	**alexanor**	Esper, [1800]	N	(S)	(Si)		
SE	II IV		089.	012.0.	002.0	**hospiton**	Géné, 1839					Sa
			089.	012.0.	003.0	**machaon**	Linné, 1758	N	S	Si		Sa
			089.	013.0.		**Iphiclides Hübner, [1819]**						
			089.	013.0.	001.0	**podalirius**	(Linné, 1758)	N	S	Si		

PARNASSIINAE

			089.	014.0.		**Parnassius Latreille, 1804**						
	IV	NT	089.	014.0.	001.0	**apollo**	(Linné, 1758)	N	S	Si		
	IV	NT	089.	014.0.	002.0	**mnemosyne**	(Linné, 1758)	N	S	Si		
		NT	089.	014.0.	003.0	**phoebus**	(de Prunner, 1798)	N				
			089.	015.0.		**Zerynthia Ochsenheimer, 1816**						
	IV		089.	015.0.	001.0	**polyxena**	([Denis & Schiffermüller], 1775)	N				
			089.	015.0.	002.0	**cassandra ▪ ***	(Geyer, [1828])		S	Si		

PIERIDAE

PIERINAE

			089.	016.0.		**Aporia Hübner, [1819]**						
			089.	016.0.	001.0	**crataegi**	(Linné, 1758)	N	S	Si		
			089.	017.0.		**Pieris Schrank, 1801**						
			089.	017.0.	001.0	**brassicae**	(Linné, 1758)	N	S	Si		Sa
			089.	017.0.	002.0	**bryoniae**	(Hübner, [1806])	N				
			089.	017.0.	003.0	**callidice ***	(Hübner, [1800])	N				
			089.	017.0.	004.0	**daplidice ***	(Linné, 1758)	N				Sa
			089.	017.0.	005.0	**edusa ***	(Fabricius, 1777)	N	S	Si		
			089.	017.0.	006.0	**ergane**	(Geyer, [1828])	N	S			
			089.	017.0.	007.0	**mannii**	(Mayer, 1851)	N	S	Si		Sa
			089.	017.0.	008.0	**napi**	(Linné, 1758)	N	S	Si		

		089.	017.0.	009.0		**rapae**	(Linné, 1758)	N	S	Si	Sa
		089.	018.0.		**Euchloe Hübner, [1819]**						
		089.	018.0.	001.0		**ausonia**	(Hübner, [1804])	N	S	Si	
		089.	018.0.	002.0		**tagis** *	(Hübner, [1804])	N			
		089.	018.0.	003.0		**crameri**	Butler, 1869	N			
	SE	089.	018.0.	004.0		**insularis**	(Staudinger, 1861)				Sa
		089.	018.0.	005.0		**simplonia**	(Freyer, 1829)	N			
		089.	019.0.		**Anthocharis Boisduval, Rambur & Graslin, [1833]**						
		089.	019.0.	001.0		**cardamines**	(Linné, 1758)	N	S	Si	Sa
		089.	019.0.	002.0		**damone**	Boisduval, 1836		S	Si	
		089.	019.0.	003.0		**euphenoides**	Staudinger, 1869	N	S		
	COLIADINAE										
		089.	020.0.		**Colias Fabricius, 1807**						
		089.	020.0.	001.0		**alfacariensis**	Ribbe, 1905	N	S		
		089.	020.0.	002.0		**crocea**	(Geoffroy, 1785)	N	S	Si	Sa
		089.	020.0.	003.0		**hyale**	(Linné, 1758)	N			
		089.	020.0.	004.0		**palaeno**	(Linné, 1761)	N			
	NT	089.	020.0.	005.0		**phicomone**	(Esper, [1780])	N			
		089.	021.0.		**Gonepteryx [Leach], [1815]**						
		089.	021.0.	001.0		**cleopatra**	(Linné, 1767)	N	S	Si	Sa
		089.	021.0.	002.0		**rhamni**	(Linné, 1758)	N	S	Si	Sa
	DISMORPHIINAE										
		089.	022.0.		**Leptidea Billberg, 1820**						
		089.	022.0.	001.0		**sinapis**	(Linné, 1758)	N	S	Si	Sa
		089.	022.0	002.0		**juvernica** ▪ *	Williams, 1946	N			
		089.	022.0	003.0		**reali** ▪	Reissinger, [1990]		S		
RIODINIDAE											
	HAMEARINAE										
		089.	023.0.		**Hamearis Hübner, [1819]**						
		089.	023.0.	001.0		**lucina**	(Linné, 1758)	N	S	Si	

LYCAENIDAE

LYCAENINAE

		089.	024.0.		**Lycaena Fabricius, 1807**					
		089.	024.0.	001.0	**alciphron**	(Rottemburg, 1775)	N	S	Si	
	II IV	089.	024.0.	002.0	**dispar**	([Haworth], 1802)	N	S		
		089.	024.0.	003.0	**eurydame**	(Hoffmansegg, 1806)	N			
		089.	024.0.	004.0	**hippothoe**	(Linné, 1761)	N			
	E	089.	024.0.	005.0	**italica** *	(Calberla, 1887)		S		
		089.	024.0.	006.0	**phlaeas**	(Linné, 1761)	N	S	Si	
		089.	024.0.	007.0	**subalpina** *	(Speyer, 1851)	N			
		089.	024.0.	008.0	**thersamon**	(Esper, [1784])	N	S		
		089.	024.0.	009.0	**tityrus**	(Poda, 1761)	N	S		
		089.	024.0.	010.0	**virgaureae**	(Linné, 1758)	N	S		
	II IV EN	089.	024.0.	011.0	**helle** ▪	([Denis & Schiffermüller], 1775)				

THECLINAE

		089.	025.0.		**Thecla Fabricius, 1807**					
		089.	025.0.	001.0	**betulae**	(Linné, 1758)	N	S		
		089.	025a.0.		**Favonius Sibatani & Ito, 1942**					
		089.	025a.0.	001.0	**quercus** ▪	(Linné, 1758)	N	S	Si	
		089.	026.0.		**Satyrium Scudder, 1876**					
		089.	026.0.	001.0	**acaciae**	(Fabricius, 1787)	N	S		
		089.	026.0.	002.0	**esculi**	(Hübner, [1804])	N			
		089.	026.0.	003.0	**ilicis**	(Esper, [1778])	N	S	Si	
		089.	026.0.	004.0	**pruni**	(Linné, 1758)	N			
		089.	026.0.	005.0	**spini**	([Denis & Schiffermüller], 1775)	N	S		
		089.	026.0.	006.0	**w-album**	(Knoch, 1782)	N	S	Si	
		089.	027.0.		**Callophrys Billberg, 1820**					
		089.	027.0.	001.0	**rubi**	(Linné, 1758)	N	S	Si	
		089.	027.0	002.0	**avis** ▪	Chapman, 1909	N			

POLYOMMATINAE

	089.	028.0.		**Leptotes Scudder, 1876**						
	089.	028.0.	001.0		**pirithous**	(Linné, 1767)	N	S	Si	Sa
	089.	028.a.		**Cacyreus Butler, [1898]**						
	089.	028.a.	001.0		**marshalli** ▪	Butler, [1898]	N	S	Si	Sa
	089.	028.b.		**Azanus Moore, [1881]**						
	089.	028.b.	001.0		**ubaldus** ▪	(Stoll, [1782])			Si	
	089.	029.0.		**Lampides Hübner, [1819]**						
	089.	029.0.	001.0		**boeticus**	(Linné, 1767)	N	S	Si	Sa
	089.	029.1		**Zizeeria Chapman, 1910**						
	089.	029.1	001.0		**karsandra** ▪	(Moore, 1865)			Si	
	089.	030.0.		**Cupido Schrank, 1801**						
	089.	030.0.	001.0		**alcetas**	(Hoffmansegg, 1804)	N	S		
	089.	030.0.	002.0		**argiades**	(Pallas, 1771)	N	S	Si	
	089.	030.0.	003.0		**minimus**	(Fuessly, 1775)	N	S	Si	
	089.	030.0.	004.0		**osiris**	(Meigen, 1829)	N	S		
	089.	031.0.		**Celastrina Tutt, 1906**						
	089.	031.0.	001.0		**argiolus**	(Linné, 1758)	N	S	Si	Sa
	089.	032.0.		**Pseudophilotes Beuret, 1958**						
	089.	032.0.	001.0		**barbagiae**	Prins & Poorten, 1982				Sa
	089.	032.0.	002.0		**baton**	(Bergsträsser, 1779)	N	S	Si	
NT	089.	032.0.	003.0		**vicrama** ▪	(Moore, 1865)	N			
	089.	033.0.		**Scolitantides Hübner, [1819]**						
	089.	033.0.	001.0		**orion**	(Pallas, 1771)	N	S		
	089.	034.0.		**Glaucopsyche Scudder, 1872**						
	089.	034.0.	001.0		**alexis**	(Poda, 1761)	N	S	Si	
	089.	034.0.	002.0		**melanops**	(Boisduval, [1828])	N			
	089.	035.0.		**Maculinea van Eecke, 1915**						

			089.	035.0.	001.0		**alcon**	([Denis & Schiffermüller], 1775)	N			
	IV	EN	089.	035.0.	002.0		**arion**	(Linné, 1758)	N	S		
			089.	035.0.	003.0		**rebeli**	(Hirschke, 1905)	N	S		
	II IV	VU	089.	035.0.	004.0		**teleius**	(Bergsträsser, 1779)	N			
			089.	036.0.		**Iolana Bethune-Baker, 1914**						
		NT	089.	036.0.	001.0		**iolas**	(Ochsenheimer, 1816)	N	S		
			089.	037.0.		**Plebejus Kluk, 1780**						
			089.	037.0.	001.0		**argus**	(Linné, 1758)	N	S	Si	
SE		NT	089.	037.0.	002.0		**trappi**	(Verity, 1927)	N			
			089.	038.0.		**Lycaeides Hübner, [1819]**						
			089.	038.0.	001.0		**abetonicus**	(Verity, 1910)	N	S		
			089.	038.0.	002.0		**argyrognomon ***	(Bergsträsser, 1779)	N	S		
SE			089.	038.0.	003.0		**corsicus ***	(Tutt, 1909)		S		
			089.	038.0.	004.0		**idas ***	(Linné, 1761)	N			
			089.	039.0.		**Aricia [Reichenbach], 1817**						
			089.	039.0.	001.0		**agestis**	([Denis & Schiffermüller], 1775)	N	S	Si	
			089.	039.0.	002.0		**allous ***	(Geyer, [1837])	N	S	Si	
			089.	039.0.	003.0		**cramera**	(Eschscholtz, 1821)				
			089.	039.0.	004.0		**nicias**	(Meigen, 1830)	N			
			089.	040.0.		**Eumedonia Forster, 1938**						
			089.	040.0.	001.0		**eumedon ***	(Esper, [1780])	N	S	Si	
			089.	041.0.		**Albulina Tutt, 1909**						
			089.	041.0.	001.0		**optilete**	(Knoch, 1781)	N			
			089.	041.0.	002.0		**orbitulus**	(de Prunner, 1798)	N			
			089.	042.0.		**Agriades Hübner, [1819]**						
			089.	042.0.	001.0		**glandon ***	(de Prunner, 1798)	N			
			089.	043.0.		**Cyaniris Dalman, 1816**						
			089.	043.0.	001.0		**semiargus**	(Rottemburg, 1775)	N	S	Si	

			089.	044.0.		**Polyommatus Latreille, 1804**					
			089.	044.0.	001.0	**icarius** ■ *	(Esper, [1789])	N	S	Si	
			089.	044.0.	002.0	**bellargus**	(Rottemburg, 1775)	N	S	Si	
			089.	044.0.	003.0	**coridon**	(Poda, 1761)	N	S		Sa
E•	E•		089.	044.0.	003.1	**gennargenti** ■ *	(Leigneb, 1987)				Sa
		NT	089.	044.0.	004.0	**damon**	([Denis & Schiffermüller], 1775)	N	S		
			089.	044.0.	005.0	**daphnis**	([Denis & Schiffermüller], 1775)	N	S	Si	
SE			089.	044.0.	006.0	**dolus**	(Hübner, [1823])	N			
		NT	089.	044.0.	007.0	**dorylas**	([Denis & Schiffermüller], 1775)	N	S		
		NT	089.	044.0.	008.0	**eros**	(Ochsenheimer, 1808)	N	S		
			089.	044.0.	009.0	**escheri**	(Hübner, [1823])	N	S		
	E		089.	044.0.	010.0	**exuberans** *	(Verity, 1926)	N			
	E	VU	089.	044.0.	011.0	**galloi**	(Balletto & Toso, 1979)		S		
			089.	044.0.	012.0	**hispanus**	(Herrich-Schäffer, 1852)	N	S		
	E	EN	089.	044.0.	013.0	**humedasae**	(Toso & Balletto, 1976)	N			
			089.	044.0.	014.0	**icarus**	(Rottemburg, 1775)	N	S		
			089.	044.0.	015.0	**ripartii**	(Freyer, [1831])	N			
			089.	044.0.	016.0	**thersites**	(Cantener, 1834)	N	S		
	E		089.	044.0.	017.0	**virgilius** *	(Oberthür, 1910)		S		
			089.	044.0.	018.0	**celinus** ■*	(Austaut, 1879)			Si	Sa
NYMPHALIDAE											
NYMPHALINAE											
			089.	045.0.		**Nymphalis Kluk, 1780**					
			089.	045.0.	001.0	**antiopa**	(Linné, 1758)	N	S		
			089.	045.0.	002.0	**polychloros**	(Linné, 1758)	N	S	Si	Sa
			089.	046.0.		**Inachis Hübner, [1819]**					
			089.	046.0.	001.0	**io** *	(Linné, 1758)	N	S	Si	Sa
			089.	047.0.		**Vanessa Fabricius, 1807**					
			089.	047.0.	001.0	**atalanta**	(Linné, 1758)	N	S	Si	Sa
			089.	047.0.	002.0	**cardui**	(Linné, 1758)	N	S	Si	Sa
			089.	048.0.		**Araschnia Hübner, [1819]**					
			089.	048.0.	001.0	**levana**	(Linné, 1758)	N			

			089.	049.0.		**Aglais Dalman, 1816**					
SE			089.	049.0.	001.0	**ichnusa**	(Hübner, [1824])				Sa
			089.	049.0.	002.0	**urticae**	(Linné, 1758)	N	S	Si	
			089.	050.0.		**Polygonia Hübner, [1819]**					
			089.	050.0.	001.0	**c-album**	(Linné, 1758)	N	S	Si	Sa
			089.	050.0.	002.0	**egea**	(Cramer, [1775])	N	S	Si	
HELICONIINAE											
			089.	051.0.		**Argynnis Fabricius, 1807**					
			089.	051.0.	001.0	**adippe**	([Denis & Schiffermüller], 1775)	N	S	Si	
			089.	051.0.	002.0	**aglaja**	(Linné, 1758)	N	S	Si	
SE	IV		089.	051.0.	003.0	**elisa**	(Godart, 1823)				Sa
		NT	089.	051.0.	004.0	**niobe**	(Linné, 1758)	N	S	Si	
			089.	051.0.	005.0	**pandora**	([Denis & Schiffermüller], 1775)	N	S	Si	Sa
			089.	051.0.	006.0	**paphia**	(Linné, 1758)	N	S	Si	Sa
			089.	052.0.		**Issoria Hübner, [1819]**					
			089.	052.0.	001.0	**lathonia**	(Linné, 1758)	N	S	Si	Sa
			089.	053.0.		**Brenthis Hübner, [1819]**					
			089.	053.0.	001.0	**daphne**	([Denis & Schiffermüller], 1775)	N	S	Si	
			089.	053.0.	002.0	**hecate**	([Denis & Schiffermüller], 1775)	N	S		
			089.	053.0.	003.0	**ino**	(Rottemburg, 1775)	N	S		
			089.	054.0.		**Boloria Moore, [1900]**					
			089.	054.0.	001.0	**dia**	(Linné, 1767)	N	S		
			089.	054.0.	002.0	**eunomia**	(Esper, [1800])	N			
			089.	054.0.	003.0	**euphrosyne**	(Linné, 1758)	N	S	Si	
			089.	054.0.	004.0	**graeca**	(Staudinger, 1870)	N			
			089.	054.0.	005.0	**napaea**	(Hoffmansegg, 1804)	N			
			089.	054.0.	006.0	**pales**	([Denis & Schiffermüller], 1775)	N	S		
			089.	054.0.	007.0	**selene**	([Denis & Schiffermüller], 1775)	N			
			089.	054.0.	008.0	**thore**	(Hübner, [1804])	N			
		NT	089.	054.0.	009.0	**titania**	(Esper, [1789])	N			

		089.	055.0.		**Melitaea Fabricius, 1807**						
		089.	055.0.	001.0	**aetherie**	(Hübner, [1826])		S	Si		
SE		089.	055.0.	002.0	**asteria**	(Freyer, 1828)	N				
		089.	055.0.	003.0	**athalia**	(Rottemburg, 1775)	N				
		089.	055.0.	003.a	**nevadensis** ▪ *	Oberthür, 1904	N	S	Si		
	NT	089.	055.0.	004.0	**aurelia**	Nickerl, 1850	N	S			
	NT	089.	055.0.	005.0	**britomartis**	Assmann, 1847	N				
		089.	055.0.	006.0	**cinxia**	(Linné, 1758)	N	S	Si		
		089.	055.0.	007.0	**deione**	(Geyer, [1832])	N				
		089.	055.0.	008.0	**diamina**	(Lang, 1789)	N	S			
		089.	055.0.	009.0	**didyma**	(Esper, [1778])	N	S	Si		
		089.	055.0.	010.0	**trivia** ▪	([Denis & Schiffermüller], 1775)	N	S			
		089.	055.0.	011.0	**parthenoides**	Keferstein, 1851	N				
		089.	055.0.	012.0	**phoebe**	([Denis & Schiffermüller], 1775)	N	S			
		089.	055.0.	013.0	**varia**	Meyer-Dür, [1851]	N	S			
		089.	055.0.	014.0	**ornata** ▪*	Christoph, 1893	?	S	Si		
		089.	056.0.		**Euphydryas Scudder, 1872**						
	II	089.	056.0.	001.0	**aurinia**	(Rottemburg, 1775)	N				
		089.	056.0.	002.0	**cynthia**	([Denis & Schiffermüller], 1775)	N				
		089.	056.0.	003.0	**glaciegenita** *	(Verity, 1928)	N				
		089.	056.0.	004.0	**provincialis** *	(Boisduval, [1828])	N	S?			
		089.	056.0.	005.0	**intermedia** ▪	(Ménétriés, 1859)	N				
	II, IV VU	089.	056.0.	006.0	**maturna** ▪	(Linné, 1758)	N				
CHARAXINAE											
		089.	057.0.		**Charaxes Ochsenheimer, 1816**						
		089.	057.0.	001.0	**jasius**	(Linné, 1767)	N	S	**Si**		Sa
APATURINAE											
		089.	058.0.		**Apatura Fabricius, 1807**						
		089.	058.0.	001.0	**ilia**	([Denis & Schiffermüller], 1775)	N	S			
		089.	058.0.	002.0	**iris**	(Linné, 1758)	N				
LIMENITIDINAE											
		089.	059.0.		**Limenitis Fabricius, 1807**						

			089.	059.0.		**Hyponephele Muschampia, 1916**							
			089.	059.0.	001.0	**camilla**	(Linné, 1764)	N	S				
			089.	059.0.	002.0	**populi**	(Linné, 1758)	N					
			089.	059.0.	003.0	**reducta**	Staudinger, 1901	N	S		Si		Sa
			089.	060.0.		**Neptis Fabricius, 1807**							
			089.	060.0.	001.0	**rivularis**	(Scopoli, 1763)	N					
			089.	060.0.	002.0	**sappho**	(Pallas, 1771)	N					
LIBYTHEINAE													
			089.	061.0.		**Libythea Fabricius, 1807**							
			089.	061.0.	001.0	**celtis**	(Laicharting, [1782])	N		S		Si	Sa
SATYRINAE													
			089.	062.0.		**Satyrus Latreille, 1810**							
			089.	062.0.	001.0	**actaea**	(Esper, [1780])	N					
			089.	062.0.	002.0	**ferula**	(Fabricius, 1793)	N		S			
			089.	063.0.		**Minois Hübner, [1819]**							
			089.	063.0.	001.0	**dryas**	(Scopoli, 1763)	N					
			089.	064.0.		**Kanetisa Moore, [1893]**							
			089.	064.0.	001.0	**circe** *	(Fabricius, 1775)	N		S		Si	Sa
			089.	065.0.		**Arethusana de Lesse, 1951**							
			089.	065.0.	001.0	**arethusa**	([Denis & Schiffermüller], 1775)	N					
			089.	066.0.		**Hipparchia Fabricius, 1807**							
SE			089.	066.0.	001.0	**aristaeus**	(Bonelli, 1826)			**S**			Sa
	E		089.	066.0.	002.0	**neapolitana** ▪	(Stauder, 1921)			S			
	E		089.	066.0.	003.0	**blachieri** *	(Fruhstorfer, 1908)			S		Si	
		NT	089.	066.0.	004.0	**fagi**	(Scopoli, 1763)	N		S		Si	
			089.	066.0.	005.0	**fidia**	(Linné, 1767)	N					
		NT	089.	066.0.	006.0	**hermione**	(Linné, 1764)	N		S		Si	
	E	NT	089.	066.0.	007.0	**leighebi**	Kudrna, 1976					Si	
SE			089.	066.0.	008.0	**neomiris**	(Godart, 1822)			S			Sa
	E	NT	089.	066.0.	009.0	**sbordonii**	Kudrna, 1984			S			
			089.	066.0.	010.0	**semele**	(Linné, 1758)	N		S		Si	

		NT	089.	066.0.	011.0	**statilinus**	(Hufnagel, 1766)	N	S	Si
			089.	067.0.		**Chazara Moore, [1893]**				
		NT	089.	067.0.	001.0	**briseis**	(Linné, 1764)	N	S	Si
			089.	068.0.		**Erebia Dalman, 1816**				
SE			089.	068.0.	001.0	**aethiopellus**	(Hoffmansegg, 1806)	N		
			089.	068.0.	002.0	**aethiops**	(Esper, [1776])	N	S	
			089.	068.0.	003.0	**albergana**	(de Prunner, 1798)	N	S	
SE	II IV		089.	068.0.	004.0	**calcaria**	Lorkovic, 1953	N		
			089.	068.0.	005.0	**dromus** ▪	(Fabricius, 1793)	N	S	
			089.	068.0.	006.0	**cassioides**	(Hohenwarth, 1792)	N		
SE	II IV	VU	089.	068.0.	007.0	**christi**	Rätzer, 1890	N		
			089.	068.0.	008.0	**epiphron**	(Knoch, 1783)	N	S	
			089.	068.0.	009.0	**eriphyle**	(Freyer, 1836)	N		
			089.	068.0.	010.0	**euryale**	(Esper, [1805])	N	S	
SE		NT	089.	068.0.	011.0	**flavofasciata**	Heyne, 1895	N		
			089.	068.0.	012.0	**gorge**	(Hübner, [1804])	N	S	
			089.	068.0.	013.0	**ligea**	(Linné, 1758)	N	S	
			089.	068.0.	014.0	**manto**	([Denis & Schiffermüller], 1775)	N		
			089.	068.0.	015.0	**medusa**	([Denis & Schiffermüller], 1775)	N	S	
			089.	068.0.	016.0	**melampus**	(Fuessly, 1775)	N		
			089.	068.0.	017.0	**meolans**	(de Prunner, 1798)	N	S	
			089.	068.0.	018.0	**mnestra**	(Hübner, [1804])	N		
			089.	068.0.	019.0	**montana**	(de Prunner, 1798)	N	S	
			089.	068.0.	020.0	**neoridas**	(Boisduval, [1828])	N	S	
			089.	068.0.	021.0	**nivalis**	Lorkovic & De Lesse, 1954	N		
			089.	068.0.	022.0	**oeme**	(Hübner, [1804])	N		
			089.	068.0.	023.0	**ottomana**	Herrich-Schäffer, 1847	N		
			089.	068.0.	024.0	**pandrose**	(Borkhausen, 1788)	N	S	
			089.	068.0.	025.0	**pharte**	(Hübner, [1804])	N		
			089.	068.0.	026.0	**pluto**	(de Prunner, 1798)	N	S	
			089.	068.0.	027.0	**pronoe**	(Esper, [1780])	N		
SE			089.	068.0.	028.0	**scipio**	Boisduval, 1832	N		
			089.	068.0.	029.0	**stiria**	(Godart, [1824])	N		
			089.	068.0.	030.0	**styx**	(Freyer, 1834)	N		
			089.	068.0.	031.0	**triaria**	(de Prunner, 1798)	N		

SE			089.	068.0.	032.0	**tyndarus**	(Esper, [1781])	N					
			089.	069.0.		**Oeneis Hübner, [1819]**							
			089.	069.0.	001.0	**glacialis**	(Moll, 1783)	N					
			089.	070.0.		**Melanargia Meigen, [1828]**							
	E	II IV	089.	070.0.	001.0	**arge**	(Sulzer, 1776)		S				
			089.	070.0.	002.0	**galathea**	(Linné, 1758)	N	S	Si			
			089.	070.0.	003.0	**occitanica**	(Esper, [1789])	N					
	E		089.	070.0.	004.0	**pherusa**	(Boisduval, 1833)			Si			
			089.	070.0.	005.0	**russiae**	(Esper, [1781])	**N**	S	Si			
			089.	071.0.		**Maniola Schrank, 1801**							
			089.	071.0.	001.0	**jurtina**	(Linné, 1758)	N	S	Si	Sa		
	E		089.	071.0.	002.0	**nurag**	(Ghiliani, 1852)				Sa		
			089.	072.0.		**Hyponephele Muschamp, 1915**							
			089.	072.0.	001.0	**lupina**	(Costa, [1836])	N	S	Si			
			089.	072.0.	002.0	**lycaon**	(Küns, 1774)	N	S	Si			
			089.	073.0.		**Aphantopus Wallengren, 1853**							
			089.	073.0.	001.0	**hyperantus**	(Linné, 1758)	N					
			089.	074.0.		**Pyronia Hübner, [1819]**							
			089.	074.0.	001.0	**cecilia**	(Vallantin, 1894)	N	S	Si	Sa		
			089.	074.0.	002.0	**tithonus**	(Linné, 1767)	N	S		Sa		
			089.	075.0.		**Coenonympha Hübner, [1819]**							
			089.	075.0.	001.0	**arcania**	(Linné, 1761)	N	S				
SE			089.	075.0.	002.0	**corinna**	(Hübner, [1804])				Sa		
			089.	075.0.	003.0	**darwiniana ***	Staudinger, 1871	N					
			089.	075.0.	004.0	**dorus**	(Esper, [1782])	N	S				
	E		089.	075.0.	005.0	**elbana**	Staudinger, 1901		S				
			089.	075.0.	006.0	**gardetta**	(de Prunner, 1798)	N					
			089.	075.0.	007.0	**glycerion**	(Borkhausen, 1788)	N	S				
		II IV	EN 089.	075.0.	008.0	**oedippus**	(Fabricius, 1787)	N					
			089.	075.0.	009.0	**pamphilus**	(Linné, 1758)	N	S	Si			

			089.	075.0.	010.0	**rhodopensis**	Elwes, 1900	N	S		
		VU	089.	075.0.	011.0	**tullia**	(Müller, 1764)	N			
			089.	075.0.	012.0	**lyllus** ▪*	(Esper, [1805])				Sa
			089.	076.0.		**Pararge Hübner, [1819]**					
			089.	076.0.	001.0	**aegeria**	(Linné, 1758)	N	S	Si	Sa
			089.	077.0.		**Lasiommata Westwood, 1841**					
	IV	VU	089.	077.0.	001.0	**achine** *	(Scopoli, 1763)	N			
			089.	077.0.	002.0	**maera**	(Linné, 1758)	N	S	Si	
			089.	077.0.	003.0	**megera**	(Linné, 1767)	N	S	Si	
			089.	077.0.	004.0	**petropolitana**	(Fabricius, 1787)	N	S		
SE			089.	077.0.	005.0	**paramegaera** ▪	(Hübner, [1824])				Sa
DANAINAE											
			089.	078.0.		**Danaus Kluk, 1780**					
			089.	078.0.	001.0	**chrysippus**	(Linné, 1758)	N	S	Si	Sa

▪ Species name absent from the previous checklist (Balletto and Cassulo, 1995), or included under a different taxonomic or nomenclatural treatment. See to the relevant notes and/or to the "nomenclature" table.

* Species name not listed in The IUCN Red List of Threatened Species -2011 (www.iucnredlist.org) and Red List of European butterflies (van Swaay *et al.* 2010), or included under a different taxonomic treatment. See to the relevant notes and/or to the "nomenclature" table.

• See to the note and/or to the nomenclature table.

NOMENCLATURE							
Tax no.	**Gen. no.**	**Spec. No.**	**Genus or Species**	**Authorship or synonym**	**Original combination or Type Species**	**Original publication**	**Locus Typicus or gender of Genus group name**
089.	001.0.		**Pyrgus**	Hübner, [1819]	[Papilio] alveolus Hübner, [1803] Samml. europ. Schmett., Pl. Pap. 92, Figs 466, 467 (TL Europa, by implication, currently treated under Pyrgus malvae Linné), by selection by Westwood, 1841 In Humphreys & Westwood, Brit. Butts Transformations (ed. 1), p 120) (Op. 278 ICZN).	Verz. bekannt. Schmett., (8): 109.	(gender: masculine)
089.	001.1.			**Scelotrix** Rambur, 1858	[Papilio] carthami Hübner, [1813] Samml. europ. Schmett., Pl. Pap. 143, Figs 726 [recte 720], 721-723. By selection by Watson, 1893, Proc. Zool. Soc. Lond., 1893: 64.	Cat. syst. Lép. Andalousie, p. 63.	(gender: feminine)
089.	001.2.			Teleomorpha Warren, 1926. Objective synonym of Scelotrix Rambur, 1858	[Papilio] carthami Hübner, [1813] Samml. europ. Schmett., Pl. Pap. 143, Figs 726 [recte 720], 721-723. By selection by Hemming, 1934 Stylops, 3: 143.	Trans. zool. Soc. Lond., 74: 18, 46.	(gender: feminine)
089.	001.3.			**Hemiteleomorpha** Warren, 1926. A subjective synonym of Pyrgus	Papilio malvae Linné, 1758 Syst. nat. (ed. x), 1: 485. By selection by Hemming, 1934 Stylops, 3: 143.	Trans. zool. Soc. Lond., 74: 19, 72.	(gender: feminine)
089.	001.4.			**Ateleomorpha** Warren, 1926	Hesperia onopordi Rambur, [1839] Faune ent. Andalousie, 2: 319, Pl. 8, Fig. 13. By selection by Hemming, 1934 Stylops, 3: 143.	Trans. zool. Soc. Lond., 74: 19, 87.	(gender: feminine)
089.	001.0.	001.0	**accretus**	(Verity, 1925)	Hesperia alveus accreta	Entomologist's Rec. J. Var., 37 (4): 55.	[France: Hautes Pyrénées:] Gèdre
089.	001.0.	002.0	**alveus**	(Hübner, [1803])	[Papilio] alveus	Samml. europ. Schmett., Pl. Pap. 92, Figs 461 463; text [1806] 1: 70, no. 5.	„Deutschland“[Germany:Schwäbische Alb: Mehrstetten LTR]
089.	001.0.	003.0	**andromedae**	(Wallengren, 1853)	Syrichtus andromedae	Öfvers. K. VetenskAkad. Förh., 10 (2): 25, no. 2.	[C] Norway: “In Alpe Dowre” [: Dalarne]
089.	001.0.	004.0	**armoricanus**	(Oberthür, 1910)	Syrichtus alveus armoricanus	Études de Lépidoptèrologie Comparée, 4: 411, Pl 57, Figs 509 520.	France: Ille et Vilaine (Bretagne): Rennes
089.	001.0.	004.1		siciliae	Syrichtus fritillum var. cirsii-siciliae Oberthür, 1912	Études de Lépidoptèrologie Comparée, 6: 100, and 4: Pl. 56, no. 505 (as Syrichtus alveus forma cirsii-siciliae).	[Italy: Sicily [Girgenti by selection by Verity, 1943 Farfalle diurne d’Italia, 1: 57)
089.	001.0.	005.0	**cacaliae**	(Rambur, [1839])	Hesperia cacaliae	Faune ent. Andalousie, 2: 313 (foot note), Pl. 8, Figs 6, 7, K.	"Alps" [France: Dauphiné: Grande Chartreuse de l'Isère LTR]
089.	001.0.	006.0	**carlinae**	(Rambur, [1839])	Hesperia carlinae	Faune ent. Andalousie, 2: 314 [foot note], Pl. 8, Fig. 11.n.	"Alpes"

089.	001.0.	007.0	**carthami**	(Hübner, [1813])	[Papilio] carthami (Op. 1599 ICZN)	Samml. europ. Schmett., Pl. Pap. 143, Fig. 726 [recte 720], 721-723 (Op. 1599 ICZN).	no text. “Europa” (by implication) [Germany: Bavaria LTR Alberti, 1938 Stett. ent. Z., 99: 236 246]
089.	001.0.	007.1		**fritillum**	Papilio fritillum [Denis & Schiffermüller], 1775	Ankündung syst. Werkes Schmett. wiener Geg., p 159.	[Austria:] Wien. By implication (wiener Gegend)
089.	001.0.	007.2		**fritillarius**	Papilio fritillarius Poda, 1761	Ins. Mus. Graec., p 79.	Austria: "Graecia" (by implication) [=Steiermark: Graz]
089.	001.0.	008.0	**centralitaliae**	(Verity, 1920)	Hesperia alveus centralitaliae	Entomologist's Rec. J. Var., 32: 4.	[Italy: Marche:] Monti Sibillini Bolognola, 1100 1400 m
089.	001.0.	009.0	**cirsii**	(Rambur, [1839])	Hesperia cirsii	Faune ent. Andalousie, 2: 315 [foot note], Pl. 8, Fig. 12.o.	France: Fontainebleau
089.	001.0.	010.1	**foulquieri**	(Oberthür, 1910)	Syrichtus alveus [f.] foulquieri	Études de Lépidoptèrologie Comparée, 4; 404, Pl 56, Figs 487 489.	France [Alpes d'Haute Provence]:Larche
089.	001.0.	010.0		**bellieri**	Syrichtus alveus [f.] bellieri	Études de Lépidoptèrologie Comparée, 4; 404, Pl 56, Figs 490, 491.	France: [Alpes d'Haute Provence]: Entrevaux: Mont Gourdon
089.	001.0.	011.0	**malvae**	(Linné, 1758)	Papilio malvae	Syst. nat. (ed. x), 1: 485, no. 167 (Op. 278 ICZN).	Not stated (Sweden, by reference to Fauna Suecica).
089.	001.0.	011.1		althaeae Esper, [1783]	P.[apilio] althaeae	Die Schmett. in Abbildungen nach der Natur..., 1 (2) Der europ. Schmett., Forts. Tagschmett., p. 149, and [1780] Pl. 51 Fig. 2 as Papilio malvae var. [no name].	„in einer Gegend hiesiger Gebürge" [Germany; Bayern: Erlangen]
089.	001.0.	011.2		sao Bergsträsser, 1779	Papilio sao	Nomencl. beschreib. Insek. Grafsch. Hanau, 2: 67, [1880] Pl. 26 [40], Figs 8, 9.	[Germany. Bayern:] Hanau (by implication).
089.	001.0.	012.0	**malvoides**	(Elwes & Edwards, 1897)	Hesperia malvoides	Trans. zool. Soc. Lond., 14 (4): 160, Pl. 23, Figs 27, 27a.	France: Pyrénées Atlantiques: Biarritz
089.	001.0.	013.0	**onopordi**	(Rambur, [1839])	Hesperia onopordi	Faune ent. Andalousie, 2: 319, Pl. 8, Fig. 13.p.	Spain: Andalusia: Granada
089.	001.0.	014.0	**picenus**	(Verity, 1920)	Hesperia foulquieri picena	Entomologist's Rec. J. Var., 32: 4.	[Italy: Abruzzi/Marche:] Monti Sibillini
089.	001.0.	015.0	**serratulae**	(Rambur, [1839])	Hesperia serratulae	Faune ent. Andalousie, 2: 318, Pl. 8, Fig. 9.m.	[Spain:] Andalusia (by implication)
089.	001.0.	016.0	**sidae**	(Esper, [1784])	P.[apilio] sidae	Die Schmetterlinge in Abbildungen nach der Natur..., 1 (2) Der europ. Schmett., Forts. Tagschmett., p. 178, Pl. 90, Fig. 3.	Russia: Volga region
089.	001.0.	017.0	**warrenensis**	(Verity, 1928)	Hesperia alveus ra. warrenensis	Bull. Soc. ent. Fr., 1928 [23] (8): 140.	Switzerland: Grisons: Lenzerheide (LTR Warren, 1929 – Entomologist’s Rec. J. Var., 40: 149)
089.	002.0.		**Spialia**	Swinhoe, [1912]	Hesperia galba Fabricius, 1793 (ent. Syst., 3: 352, n 337), TL [SE India: S Coromandel:] Tranquebar, by original designation	In: Moore Lepid. indica, 10 (113): 99.	(gender: feminine)

089.	002.0.	001.0	**orbifera**	(Hübner, [1823])	[Papilio] orbifer	Samml. europ. Schmett., Pl. Pap. 161, Figs 803-806.	no text. “Europa” (by implication) [Hungary]
089.	002.0.	002.0	**sertorius**	(Hoffmansegg, 1804)	Papilio sertorius Replacement name for [Papilio] sao Hübner, [1803] Samml. Europ. Schmett., Pl. Pap. 93, Figs 471, 472. A Primary homonym of Papilio sao Bergsträsser, 1779 (currently Pyrgus malvae Linné)	Mag. f. Insektenk. (Illiger), 3: 203.	Germany
089.	002.0.	002.1		**hibiscae**	Spialia hibiscae Hemming, 1936	Proc. R. ent. Soc. Lond., (B) 5 (6): 124 (see Op. 975 ICZN).	"Germany" Hemming, 1936, Proc. R. ent. Soc. Lond., (B) 5 (6): 124)
089.	002.0.	002.2		sao	[Papilio] sao Hübner, [1803]. Primary homonym of Papilio sao Bergsträsser, 1779 (currently Pyrgus malvae Linné)	Samml. Eur. Schmett., 1: Pl. Pap. 93, Figs 471, 472.	no text. “Europa” (by implication) [Germany]
089.	002.0.	003.0	**therapne**	(Rambur, 1832)	Hesperia therapne	Ann. Soc. ent. Fr., [1]: 265, Pl. 7, Fig. 4.	[France:] Corsica
089.	003.0.		**Carcharodus**	Hübner, [1819]	P.[apilio] alceae Esper, [1780] Die Schmett. in Abbildungen nach der Natur..., 1 (2) Der europ. Schmett., Forts. Tagschmett., p. 4, Pl. 51, Fig. 3, by designation under the plenary power (Op. 181, 270 ICZN)	Verz. bekannt. Schmett., (7): 110.	(gender: masculine)
089.	003.1.			**Reverdinus** Ragusa, 1919	[Papilio] altheae Hübner. [1803] Samml. eur. Schmett., Pl. Pap. 90, Figs 452, 453.	Naturalista sicil., 23 (7 12): 172.	(gender: masculine)
089.	003.2.			**Syrichtus** Boisduval, [1834] A junior subjective synonym of Carcharodus Hübner, [1819]	[Papilio] malvae Hübner, [1803] Samml. eur. Schmett., Pl. Pap. 90, Figs 450, 451. By selection by Blanchard, 1845, in Castlenau, Histoire des Insectes, leur mœurs, leurs métamorphoses et leur classification, ou traité élémentaire d'Entomologie, 2: 348.	Icones hist. Lép. nouveau ou peu connus ..., 1 (23/24): 230.	(gender: masculine)
089.	003.3.			**Lavatheria** Verity, 1940	P.[apilio] lavatherae, Esper, [1783] Die Schmetterlinge in Abbildungen nach der Natur..., 1 (2) Der europ. Schmett., Forts. Tagschmett., p.148, Pl. 82, Fig. 4	Farfalle diurne d’Italia, 1: 11, 22.	(gender: feminine)
089.	003.4.			Spilothyrus Duponchel, 1835. An objective synonym of Carcharodus Hübner, [1819]	P.[apilio] alceae Esper, [1780] Die Schmett. in Abbildungen nach der Natur..., 1 (2) Der europ. Schmett., Forts. Tagschmett., p. 4, Pl. 51, Fig. 3. By designation under the plenary power (Op. 168, 181, 270 ICZN).	In Godart, Hist. nat. Lepid., suppl. 1 (Diurnes): 415.	(gender: masculine)
089.	003.0.	001.0	**alceae**	(Esper, [1780])	P.[apilio] alceae	Die Schmetterlinge in Abbildungen nach der Natur..., 1 (2) Der europ. Schmett., Forts. Tagschmett., p. 4, Pl.	[Germany: Bayern:] Erlangen

						51, Fig. 3? (Op. 270 ICZN).	
089.	003.0.	001.1		"malvae"	[Papilio] malvae Hübner, [1803]. Misidentification of Papilio malvae Linné	Samml. eur. Schmett., Pl. Pap. 90, Figs 450, 451.	Deutschland
089.	003.0.	001.2		**malvarum**	[Papilio] malvarum Hoffmansegg, 1804. Replacement name for [Papilio] malvae Hübner, [1803] Samml. eur. Schmett., Pl. Pap. 90, Figs 450, 451, nec Linné, 1758, but also originally published as a synonym of P. alceae Esper.	Mag. f. Insektenk. (Illiger), 3: 198.	"Europa" (by implication)
089.	003.0.	002.0	**baeticus**	(Rambur, [1839])	Syrichtus baeticus	Faune ent. Andalousie, 2, Pl. 12, Figs 3, 4 (no text).	Spain: Andalusia (by implication)
089.	003.0.	002.1		marrubii	Pamphila marrubi Rambur, [1840] Replacement name for Syrichtus baeticus Rambur, [1839]. Unnecessary substitution.	Faune ent. Andalousie, 2: 111, no. 3 and 323 (foot note).	Spain: Andalusia (by implication)
089.	003.0.	003.0	**floccifer**	(Zeller, 1847)	Hesperia floccifera	Isis (von Oken), 1847 (4): 286	Italy: Sicily: Siracusa
089.	003.0.	003.1		**alchymillae**	Carcharodus alchymillae Hemming, 1936 (see Op. 975 ICZN)	Proc. R. ent. Soc. Lond., (B) 5 (6): 124.	[Germany. Bayern:] Hanau by implication by Bergsträsser, Nomencl. beschreib. Insek. Grafsch. Hanau, Pl. 91, Figs 1, 2]
089.	003.0.	003.2		altheae	[Papilio] altheae Hübner, [1803] a Primary Homonym of P.[apilio] althaeae Esper, [1783] Die Schmett. in Abbildungen nach der Natur..., 1 (2) Der europ. Schmett., Forts. Tagschmett., p. 149, [1780] Pl. 51, Fig. 2 as Papilio malvae var. [no name given in plate] (currently Pyrgus malvae)	Samml. europ. Schmett., Pl. Pap. 90, Fig. 452, 453; [1806] text, p. 69.	"Deutschland"
089.	003.0.	003.2		gemina	Carcharodus gemina Alberti, 1955 Zeitschr. Lepidopt., 3: 136	Zeitschr. Lepidopt., 3: 136.	Italy, Sicily: Palermo.
089.	003.0.	003.3		**imperator**	Hemming, 1934 Substitution name for [Papilio] altheae Hübner, [1803], as a junior Primary Homonym of P.[apilio] althaeae Esper, [1783] Die Schmett. in Abbildungen nach der Natur..., 1 (2) Der europ. Schmett., Forts. Tagschmett., p. 149 (now P. malvae).	Stylops, 3: 99, no. 19.	"Deutschland" (by substitution)
089.	003.0.	004.0	**lavatherae**	(Esper, [1783])	P.[apilio] lavatherae	Die Schmetterlinge in Abbildungen nach der Natur..., 1 (2) Der europ. Schmett., Forts. Tagschmett., p. 148, Pl. 82, Fig. 4	France, Switzerland

089.	004.0.		**Sloperia**	Tutt, [1906]	Hesperia poggei Lederer, 1858 Wien. ent. Monatschr., 2 (5): 141 LT: [Syria:] Damascus.	Nat. Hist. brit. Butts, 1 (7): 218.	(gender: feminine)
089.	004.1.			**Muschampia** Tutt, [1906]	Papilio proto Esper, [1830] Die Schmett. in Abbildungen nach der Natur..., Suppl. 2, p. 32, Pl. 123, Figs 5, 6 (by original designation)	Nat. Hist. Brit. Butts., 1 (7): 218.	(gender: feminine)
089.	004.0.	001.0	**proto**	(Ochsenheimer, 1808)	Papilio proto	Schmett. Europa, 1 (2): 210.	Portugal
089.	005.0.		**Erynnis**	Schrank, 1801	Papilio tages Linné, 1758	Fauna boica, 2 (1): 152, 157.	(gender: feminine)
089.	005.1.			**Thanaos** Boisduval, [1834]	Hesperia juvenalis Fabricius, 1793, Ent. Syst., 3 (1): 339, no.. 291. TL: "America". By selection by Butler, 1870, Entomol. month. Mag., 7 (77): 97.	Icon. hist. Lepid. Europe, 1 (19/20): 240.	(gender: masculine)
089.	005.0.	001.0	**tages**	(Linné, 1758)	Papilio tages	Syst. nat. (ed. x), 1: 485, no. 168.	"Europa"
089.	006.0.		**Heteropterus**	Duméril, 1805	Papilio aracinthus Fabricius, 1777 Gen. Ins., p. 271. By selection by Hemming, 1934 Gen. Names holart. Butts, 1: 167	Zool. analytique, p 271, note 3.	(gender: masculine)
089.	006.1.			**Cyclopides** Hübner, [1819]. A subjective synonym of Heteropterus.	Papilio aracinthus Fabricius, 1777, Gen. Ins., p. 271.	Verz. bekannt. Schmett. (7): 111.	(gender: masculine)
089.	006.0.	001.0	**morpheus**	(Pallas, 1771)	Papilio morpheus	Reise verschied Prov. Russisch. Reichs, 1: 471; Appx. p. 64.	Southern Russia [:Volga]:Samara
089.	006.0.	001.1		**aracinthus**	Papilio aracinthus Fabricius, 1777	Gen. Ins., p. 271, no. 391-92.	"Austria"
089.	007.0.		**Carterocephalus**	Lederer, [1853]	Papilio paniscus Fabricius, 1775 Ent. syst., p. 531. By selection by Scudder, 1875, Proc. Amer. Acad. Arts Sci., Boston, 10: 134.	Verh. zool-bot. Ges. Wien, 2: 26.	(gender: masculine)
089.	007.0.	001.0	**palaemon**	(Pallas, 1771)	Papilio palaemon	Reise verschied Prov. Russisch. Reichs, 1: 471, no. 63.	"Russia" [Volga area]
089.	007.0.	001.1		**paniscus**	Papilio paniscus Fabricius, 1775	Ent. syst., p. 531.	[Germany: Sachsen;] Leipzig
089.	008.0.		**Thymelicus**	Hübner, [1819]	Papilio acteon Rottemburg, 1775 Der Naturforscher, 6: 30 by selection by Butler 1870 (Op. 278 ICZN)	Verz. bekannt. Schmett., (8): 113.	(gender: masculine)
089.	008.1.			**Adopoea** Billberg, 1820	Papilio linea Müller, 1766, In Allioni, Manipulum insectorum Taurinensium. Mél. de Phil. et de Math. Soc. roy. Turin, 3 (7): 192. By monotypy.	Enum. Ins. Mus. Billberg, p. 81.	(gender: feminine)
089.	008.0.	001.0	**acteon**	(Rottemburg, 1775)	Pap.[ilio] acteon On the "Official list and indexes of names and works in Zoology", no. 2575. (Op. 1058)	Der Naturforscher, 6: 30, no. 18.	[Poland:] Landsberg an der Warthe" (= Gorzów Wielkopolski)

089.	008.0.	002.0	**sylvestris**	(Poda, 1761)	[Papilio] sylvestris	Insecta musei graecensis, p 79, no. 51.	[Austria:] "Graecia" (by implication) [=Steiermark: Graz]
089.	008.0.	002.1		**flavus**	Papilio flava Pontoppidan, 1763	Danske Atlas, 1: 685, no. 36.	Denmark (by implication)
089.	008.0.	002.2		**linea**	Papilio linea Müller, 1766	In Allioni, Manipulum insectorum Taurinensium. Mél. de Phil. et de Math. Soc. roy. Turin, 3 (7): 192.	[Italy:] Torino. By implication.
089.	008.0.	002.3		**thaumas**	Papilio thaumas Hufnagel, 1766	Berlinisches Mag., 2: 62, no. 10.	[Germany: Berlin:] "hiesigen Gegend"
089.	008.0.	003.0	**lineola**	(Ochsenheimer, [1808])	Papilio lineola	Schmett. Europa, 1 (2): 230.	[Germany]
089.	009.0.		**Hesperia**	Fabricius, 1793	Papilio comma Linné, 1758, Syst. Nat. (ed. x), 1: 484, by selection by Dalman, 1816 (K. Svensk. Vetensk. Akad. Handl., Stockholm, 1816 (1): 200) (Op. 1240 ICZN)	Entomol. Syst., 3 (1): 258.	(gender: feminine)
089.	009.1.			Pamphila Fabricius, 1807. Objective synonym of Hesperia Fabricius	Papilio comma Linné, 1758 Syst. nat. (ed. x) 1: 484. By selection by Westwood, 1840 Introd. Class. Ins., 2, Generic Synopsis, p. 88.	Mag. f. Insektenk. (Illiger) 6: 287, no. 41.	(gender: feminine)
089.	009.2.			Urbicola Tutt, 1905	Papilio comma Linné, 1758, Syst. nat. (ed. x) 1: 484. By original designation.	Nat. Hist. brit. Butts, 1: 84.	(gender: feminine)
089.	009.0.	001.0	**comma**	(Linné, 1758)	Papilio comma	Syst. nat. (ed. x), 1: 484, no. 162 (see Op. 1240 ICZN).	"Europa" [Sweden: LTR Verity 1940 Farfalle diurne d'Italia, 1: 112]
089.	010.0.		**Ochlodes**	Scudder, 1872	Hesperia nemorum Boisduval, 1852 Ann. Soc. ent. Fr., (2) 10: 314, no. 75 TL California (by implication), by original designation	4th annl Rept Peabody Acad. Sci. for the year 1871, p. 78.	(gender: masculine)
089.	010.1.			"Augiades" Auctorum, nec Hübner, [1819]	Papilio crinisus Cramer, [1780], Uitl. Kapellen, 4 (25): 20, Pl. 300, Figs. G, H, TL: Surinam, By selection by Butler, 1870, Entomol. month. Mag., 7: 58.	Augiades Hübner, [1819], Verz. bekannt. Schmett. (7): 112.	(gender: masculine)
089.	010.0.	001.0	**sylvanus**	(Esper, [1777])	Papilio sylvanus ICZN (Op. 1944) has ruled under the plenary power that this name is not invalid by reason of being a junior primary homonym of Papilio sylvanus Drury ,[1773], 2: [91] (index); text p. 5, Pl. 3, Figs 2, 3. LT: "Sierra Leon in Africa") (currently Anthene sylvanus).	Die Schmetterlinge in Abbildungen nach der Natur..., 1 [1] (6) Die Tagschmetterlinge, Pl. 36, Fig. 1, text [1779] p.343.	[Germany:] Franken
089.	010.0.	001.1		"venatus"	Ochlodes venatus Auctorum, nec Hesperia venata Bremer & Grey, 1853	Schmett. N. China, p. 11, no. 46; Pl. 3, Fig. 5.	N. China: Pekin [=Beijing]
089.	010.0.	001.2		alexandra	Hemming, 1934.	Stylops, 3: 99, no. 20.	[Germany:] Franken (by substitution)

					Substitution name for [Papilio] sylvanus Esper, [1777] Die Schmetterlinge in Abbildungen nach der Natur..., 1 [1] (6), Pl. 36, Fig. 1, as a junior Primary Homonym of Papilio sylvanus Drury, [1773], Ill. nat. Hist, 2: [91] (index); text p. 5, Pl. 3, Figs 2, 3. LT: .Sierra Leon in Africa. (currently Anthene sylvanus). Currently an unnecessary substitution (see Op. 1944).		
089.	010.0.	001.0		**faunus**	Augiades faunus Turati, 1906	Naturalista Siciliano, 18 (2/3): 36, Pl. 6, Figs 5,9; Pl. 7, Fig. 3.	[France: Hautes Pyrénées:] Gavarnie, 1350 m
089.	011.0.		**Gegenes**	Hübner, [1819]	[Papilio] pumilio Hoffmansegg, 1804, Mag. f. Insektenk (Illiger), 3: 202, as interpreted on the basis of the lectotype designated by Hemming,1964 (Annot. Lep., 1: 112), by designation under the plenary power (Op. 827 ICZN).	Verz. bekannt. Schmett., (7): 107.	(gender: feminine)
089.	011.0.	001.0	**nostrodamus**	(Fabricius, 1793)	Hesperia nostrodamus	Entomologia systematica, 3 (1): 328, no. 246.	"Barbaria" [=Algeria]
089.	011.0.	002.0	**pumilio**	(Hoffmansegg, 1804)	[Papilio] pumilio A name created for Papilio pygmaeus Cyrillo, 1787 Entomologiae neapolitanae Specimen, p. [20], Pl. 5, Fig. 5, as well as figured by Hübner, [1803], Samml. Europ. Schmett., Pl. Pap. 91, Figs 458-460, and text p. 72.	Mag. f. Insektenk. (Illiger), 3: 202 as interpreted by the lectotype designated by Hemming, 1964 (Annot. Lep., 1: 112), by designation under the plenary power (Op. 827 ICZN).	[Italy: Campania:] Amalfi (SA), and Castellammare di Stabia (NA) (by implication, on the basis of Cyrillo's book)
089.	011.0.	002.1		"pygmaeus"	Papilio pygmaeus Cyrillo, 1787. Misidentification of Papilio pygmaeus Fabricius, 1775 Syst. entom., p. 536, no. 401, TL: "Habitat in India" (currently Aeromachus pygmaeus).	Entomologiae neapolitanae Specimen, p. [20], Pl. 5, Fig. 5.	"Habitat in Amalfeae orae, et Stabiae locis sterilibus" [=Italy, Campania: Amalfi (SA), and Castellammare di Stabia (NA)]
089.	012.0.		**Papilio**	Linné, 1758	Papilio machaon Linné, 1758 (Syst. Nat. (ed. x), 1: 462), by selection by Latreille, 1810 (Consid. Gén. Anim. Crust. Arach. Ins., p. 440, 350) (Op. 278 ICZN)	Syst. Nat. (ed. x), 1: 458.	(gender: masculine)
089.	012.0.	001.0	**alexanor**	Esper, [1800]	P.[apilio] alexanor (nomen protectum: Art. 23.9.2)	Die Schmetterlinge in Abbildungen nach der Natur..., Suppl. Theil 1, p. 89, Pl. 110, Fig. 1.	[France:] Provence: Nice
089.	012.0.	001.1		**polidamas**	Pap.[ilio] polidamas de Prunner, 1798 (nomen oblitum : Art. 23.9.1)	Lepidoptera pedemontana, p. 69, no. 134.	[France: Alpes Maritimes:] "Nice en Provence".
089.	012.0.	001.2		polychaon	P.[apilio] polychaon de Loche, 1801. A name originally published as a synonym of Papilio polidamas de Prunner	Mem. R. Accad. Sci. Torino, 6 (2): 139, no. 1, Pl. 6, Fig. 1.	[France: Alpes Maritimes:] "environs de Lantosca" [=Lantosque]

089.	012.0.	002.0	**hospiton**	Gené, 1839	Papilio hospiton	Mem. Accad. Sci. Torino, (2) 1 (2): 83, no. 45, Pl. 2, Figs 20, 21.	[Italy,] Sardinia: [Prov. Nuoro: Tortoli]
089.	012.0.	003.0	**machaon**	Linné, 1758	Papilio machaon	Syst. nat. (ed. x), 1: 462, no. 27 (see Op. 278 ICZN).	Not stated (Sweden: LTR Verity 1947 Farfalle diurne d'Italia, 3: 16)
089.	013.0.		**Iphiclides**	Hübner, [1819]	Papilio podalirius Linné, 1758 Syst. Nat. (ed. X), p. 463 (foot note). By selection by Scudder, 1872 4th annl Rept Peabody Acad. Sci., 1871: 65	Verz. bekannt. Schmett., (6): 82.	(gender: masculine)
089.	013.0.	001.0	**podalirius**	(Linné, 1758)	Papilio podalirius as interpreted by the lectotype designated under the plenary power by ICZN, namely the specimen described by Ray, 1710 (Hist. Ins., p. 111, no. 3, LT "Livorno, Tuscany") (Op. 263 ICZN).	Syst. nat. (ed. x), 1: 463 (foot note) with reference to Ray, p. 111 no. 3 etc.).	"Habitat in Europae australis et Africae" [Italy:] Toscana: Livorno (Op. 263 ICZN)
089.	013.0.	001.1		**sinon**	Papilio sinon Poda, 1761	Insecta mus. graec., p. 62, no. 2, Pl. 2, Fig. 1.	[Austria:] "Graecia" (by implication) [=Steiermark: Graz]
089.	014.0.		**Parnassius**	Latreille, 1804	Papilio apollo Linné, 1758 Syst. Nat. (ed. X), p. 465. By monotypy.	Nouveau Dict. Hist. nat., 24 (Tab.): 185, 199.	(gender: masculine)
089.	014.1.			**Driopa** Korshunov, 1988	Papilio mnemosyne Linné, 1758, Syst. nat. (ed. x), 1: 465, no. 42.	Novye i Maloizvestiye Vidy Fauny Sibiri, (20): 65.	(gender: feminine)
089.	014.0.	001.0	**apollo**	(Linné, 1758)	Papilio apollo	Syst. nat. (ed. x), 1: 465, no. 41.	"Svecia"
089.	014.0.	002.0	**mnemosyne**	(Linné, 1758)	Papilio mnemosyne	Syst. nat. (ed. x), 1: 465, no. 42.	"Finlandia"
089.	014.0.	003.2	**phoebus**	(de Prunner, 1798)	Pap.[ilio] phoebus A name proposed for conservation (ICZN Case 3637) Currently a junior primary homonym of Papilio phoebus Fabricius, 1793.	Lepidoptera pedemontana, p. 69, no. 135.	[Italy: Piemonte] "in fine Varaitanae vallis … invenitur in Monte Verz"
089.	014.0.	003.1		"phoebus"	Parnassius phoebus Auctorum, nec Papilio phoebus Fabricius, 1793	Entomologia systematica, 3 (1): 181, no. 561.	[Russia:] Siberia
089.	014.0.	003.0		sacerdos	Parnassius phoebus sacerdos Stichel, 1907. Replacement name for Papilio delius Esper, [1804].	Berl. Ent. Z., 51: 86, f.	Alps [of Switzerland:] by Geneva. By replacement.
089.	014.0.	003.3		delius	Papilio delius Esper, [1804]. A junior primary homonym of Papilio delius Drury, [1782] Ill. nat. Hist., 3: [77] (index) and 3: 18 (description), Pl. 14, Figs 5, 6. TL "Sierra Leon" (currently Antanartia delius) (see also Op. 474 and 516 ICZN)	Die Schmetterlinge in Abbildungen nach der Natur..., Suppl. Theil 1, p. 114, Pl. 115, Fig. 5.	Alps [of Switzerland:] by Geneva.
089.	014.0.	003.4		**gazeli**	Parnassius phoebus gazeli Praviel, 1936	Bull. Soc. ent. Fr., 41: 266.	[France: Alpes de Haute Provence:] la haute vallée du Boréon (région de Saint Martin Vésubie)
089.	015.0.		**Zerynthia**	Ochsenheimer, 1816 Replacement name for Thais Fabricius, 1807 nec Röding, 1798 (Op.	Papilio hypsipyle Fabricius, 1776 (Gen. Ins. Mantissa, p. 265), by substitution (Op. 1134)	Schmett. Europa, 4: 29.	(gender: feminine)

				1134)			
089.	015.1			Thais Fabricius, 1807. Junior homonym of Thais [Röding], 1798 – Mus. Bolten, 2: 54 (Mollusca: Muricidae).	Papilio hypsipyle Fabricius, 1776 (Gen. Ins. Mantissa, p. 265). By monotypy.	Mag. f. Insektenk. (Illiger), 6: 283, no. 20.	(gender: feminine)
089.	015.2.			Parnalius Rafinesque, 1815. Name suppressed under the plenary power for the purposes of the Principle of Priority but not for those of the Principle of Homonymy (Op. 1134 ICZN).	Papilio hypsipyle Fabricius, 1776 (Gen. Ins. Mantissa, p. 265). Replacement name for Thais Fabricius, 1807 nec Röding, 1798.	Analyse Nat., p. 128, no. 27.	(gender: masculine)
089.	015.0.	001.0	**polyxena**	([Denis & Schiffermüller], 1775)	P.[apilio] polyxena	Ankündung syst. Werkes Schmett. wiener Geg., p. 162, no. 1 (see Op. 1134 ICZN).	[Austria:] Wien. By implication (wiener Gegend)
089.	015.0.	001.1		**hypsipyle**	Fabricius, 1776 Nomen Sobstitutum for Papilio hypermnestra Scopoli, 1763 Ent. Carniolica, p. 149, no. 425, Pl. [17]. Fig. 425. Junior primary homonym of Papilio hypermnestra Linné, 1763 Amoen. academ., 6: 407, no. 69 "habitat in Java".	Gen. Ins. Mantissa, p. 265, no. 271 72.	"Carniola" [=Slovenia: Ljubljana] (by replacement (Art. 72.7; 76.1 ICZN) and by implication)
089.	015.0.	002.0	**cassandra**	(Geyer, [1828])	[Papilio] cassandra	Samml. eur. Schmett. [1]: Pl. 185, Figs. 910-913.	[Italy:] Toscana [Geyer MS 2: see Hemming, 1937, Hübner. A bibliographical and systematic account…, v 1: 219]. [Tuscany: Prato: San Giorgio a Colonia (NT Dapporto 2010, J. zool. syst. evol. Res, 48 (3): 236)).
089.	015.0.	002.1		**creusa**	Thais creusa Meigen, 1829	Syst. Beschr. eur. Schmett., 1: 161, no. 2-3. Pl. 42, Fig. 1.	“aus Italien”
089.	015.0.	002.2		**demnosia**	Pap. [ilio] Zerynthia demnosia Freyer, 1831	Neuere Beitr. Schm., 1 (2): 15, no. 8. Pl. 7, Fig. 2.	“In litorale” [Florenciae]
089.	016.0.		**Aporia**	Hübner, [1819]	Papilio crataegi Linné, 1758 Syst. Nat. (ed. X), p. 467. By monotypy.	Verz. bekannt. Schmett., (6): 90.	(gender: feminine)
089.	016.0.	001.0	**crataegi**	(Linné, 1758)	Papilio crataegi	Syst. nat. (ed. x), 1: 467, no. 57.	Not stated (Scandinavia: Verity, 1913. Boll. Soc. ent. Ital., 44: 202); (LTR: Sweden: LTR Verity 1947 Farfalle diurne d’Italia, 3: 186)
089.	017.0.		**Pieris**	Schrank, 1801	Papilio brassicae Linné, 1758 (Syst. Nat. (ed. x), 1: 467), by selection by Latreille, 1810 (Consid. gén. Anim.	Fauna boica, 2 (1): 152, 161.	(gender: feminine)

					Crust. Arach. Ins., p. 440, 351) (Op. 278 ICZN)		
089.	017.1.			**Artogeia** Verity, 1947	Papilio napi Linné, 1758 Syst. nat. (ed. x), 1: 468. By original designation	Farfalle diurne d'Italia, 3: 192.	(gender: feminine)
089.	017.2.			**Pontia** Fabricius, 1807	Papilio daplidice Linné, 1758 Syst. Nat. (ed. X), 1: 468. By selection by Curtis, 1824 British Entomology, 5, Pl. 48. Conserved under the plenary power (Op. 137, 232; Dir 4 ICZN)	Mag. f. Insektenk. (Illiger), 6: 283, no. 23.	(gender: feminine)
				Leucochloe Röber, [1907]. Objective synonym of Pontia.	Papilio daplidice Linné, 1758 Syst. Nat. (ed. X), 1: 468. By selection by Klots, 1932, Ent. Amer., (ns) 12 (4): 212.	In Seitz, Grossschmett. Erde 1: 49 (as Leucochloë).	(gender: feminine)
089.	017.3.			**Synchloe** Hübner, 1818	[Papilio] callidice Hübner, [1800] Samml. europ. Schmett., Pl: Pap. 51, Figs 408, 409. By selection by Butler, 1870 Cistula ent., 1: 51.	Zutr. z. Samml. exot. Schmett., 1: 26 (as Synchloë).	(gender: feminine)
089.	17.4.			Mancipium Hübner, [1806] Invalid name, as included in a work rejected for nomenclatorial purposes. (Op. 97 ICZN).	Papilio brassicae Linné, 1758 (Syst. Nat. (ed. x), 1: 467). By original designation.	Tentamen determinationis, digestionis atque denominationis…Lepidoperum…, p. [1].	(gender: masculine)
089.	017.0.	001.0	**brassicae**	(Linné, 1758)	Papilio brassicae	Syst. nat. (ed. x), 1: 467, no. 58 (see Op. 278 ICZN).	Not stated (Sweden: LTR Verity 1947 Farfalle diurne d'Italia, 3: 241)
089.	017.0.	002.0	**bryoniae**	(Hübner, [1806])	[Papilio] bryoniae	Samml. europ. Schmett., 1 (text): 62, no. 4, note (with reference to Pl. 81, Fig. Pap. 407, as [Papilio] napi).	Not stated. "Europa" (by implication) [Germany]
089.	017.0.	003.0	**callidice**	(Hübner, [1800])	[Papilio] callidice	Samml. europ. Schmett., Pl: Pap. 81, Figs 408, 409; text [1806] 1: 63, no. 5.	Mountains of Switzerland
089.	017.0.	004.0	**daplidice**	(Linné, 1758)	Papilio daplidice	Syst. nat. (ed. x), 1: 468, no. 62 (see Op. 232 ICZN).	"in Europa australi et Africa" (NW Africa: LTR Hesselbarth, Oorschot & Wagener 1988, Die Tagfalter der Türkei, 1: 426)
089.	017.0.	005.0	**edusa**	(Fabricius, 1777)	Papilio edusa	Genera Insectorum, p. 255, no. 126-27.	"Habitat Chilonii" [Germany: Schleswig Holstein: Kiel]
089.	017.0.	006.0	**ergane**	(Geyer, [1828])	[Papilio] ergane	Samml. europ. Schmett., Pl. Pap. 184, Figs 904-907.	[Croatia:] Ragusa [= Dubrovnik] (see Hemming, 1937, Hübner. A bibliographical and systematic account…, 1: 220)
089.	017.0.	007.0	**mannii**	(Mayer, 1851)	Pont.[ia] mannii	Stettin. ent. Ztg, 12 (5): 151.	[Croatia:] "Spaloto" [= Spalato= Split]
089.	017.0.	008.0	**napi**	(Linné, 1758)	Papilio napi	Syst. nat. (ed. x), 1: 468, no. 60.	Not stated (Scandinavia: Verity, 1913. Boll. Soc. ent. Ital., 44: 202); (LTR: Sweden: LTR Verity 1947 Farfalle diurne d'Italia, 3: 193)
089.	017.0.	008.1		**flavescens**	Pieris napi flavescens Müller, 1933.	Int. ent. Z. Guben, 27: 93.	[Austria: Lower Austria:] Mödling

					Validation of Pieris napi ab. flavescens Wagner, 1903 Verh. kais.-kön. zool. bot. Ges. Wien, 53, 176, Pl. 1, Fig. 1 (a formerly infrasubspecific name).		
089.	017.0.	008.2		**napaeae**	Papilio napi f. napaeae Esper [1804]	Die Schmetterlinge in Abbildungen nach der Natur..., Suppl. 1 (10): 119, (2): Pl. 116, Fig. 5.	"Europa“ [by implication]
089.	017.0.	009.0	**rapae**	(Linné, 1758)	Papilio rapae	Syst. nat. (ed. x), 1: 468, no. 59.	Not stated (Sweden: LTR Verity 1947 Farfalle diurne d'Italia, 3: 231)
089.	018.0.		**Euchloe**	Hübner, [1819]	Euchlöe [sic] ausonia var. esperi Kirby, 1871, Syn. Cat. diurn. Lep.: 506) by designation under the plenary power: (Op. 168, 270 ICZN)	Verz. bekannt. Schmett., (6): 94.	(gender: feminine)
089.	018.0.	001.0	**ausonia**	(Hübner, [1804])	[Papilio] ausonia	Samml. europ. Schmett., Pl. Pap. 113, Figs 582, 583; text: [1806] 1: 64, no. 12.	“Italien”
089.	018.0.	002.0	**tagis**	(Hübner, [1804])	[Papilio] tagis	Samml. europ. Schmett., Pl. Pap. 110, Figs 565, 566. text [1806] 1: 64, no. 11.	“Portugall am Tagus”
089.	018.0.	002.1		**bellezina**	Pieris bellezina Boisduval, [1828]	Europaeorum lepidopterorum index methodicus, 1: 9.	"Galloprovincia" [= France: Var: Saint- Maximin, since specimens were collected by Saporta]
089.	018.0.	002.1		**calvensis**	Euchloe tagis calvensis Casini, 1993	Linn. belg., 14 (1): 3 14.	[Italy: Toscana:] Pr. Livorno: Monte Calvi
089.	018.0.	003.0	**crameri**	Butler, 1869	Euchloe crameri Replacement name for Papilio belia Cramer [recte Stoll], [1782] Uitl. Kapell., 4: 225, Pl. 397, Figs A, B, primary homonym of Papilio belia Linné, 1797 Syst. Nat. (ed. 12), p. 761, no. 84 (see Op. 516 ICZN)	Entomol. month. Mag., 5: 271.	France: Provence, Languedoc (by replacement) (Art. 72.7; 76.1 ICZN). Butler, ibid: listed "S Europa" invalid type locality
089.	018.0.	004.0	**insularis**	(Staudinger, 1861)	Anthocharis tagis v. insularis	Catalog der Lepidopteren Europas und der angrenzenden Länder. I. Macrolepidoptera, p. 2, no. 36b.	[France:] Corsica
089.	018.0.	005.0	**simplonia**	(Freyer, 1829)	Papilio Pontia simplonia	Beitr. z. Gesch. europ. Schmett., 2 (13): 87, no. 99, Pl. 73, Fig. 2.	[Passo del Sempione: by implication]
089.	019.0.		**Anthocharis**	Boisduval, Rambur & Graslin, [1833]	Papilio cardamines Linné, 1758 Syst. nat. (ed. x), 1: 468. By monotypy	Coll. icon. hist, chenilles Europ., (21), Pl. 5.	(gender: feminine)
089.	019.0.	001.0	**cardamines**	(Linné, 1758)	Papilio cardamines	Syst. nat. (ed. x), 1: 468, no. 63.	Not stated [Sweden: LTR Verity 1947 Farfalle diurne d'Italia, 3: 143]
089.	019.0.	002.0	**damone**	Boisduval, 1836	Anthocharis damone	Histoire naturelle des Insectes Lépidoptères. Species général des Lépidoptères, p. 564, no. 8.	[Italy:] Sicily
089.	019.0.	003.0	**euphenoides**	Staudinger, 1869	Anthocharis eupheno euphenoides	Stettin. ent. Ztg., 30: 92.	“Europa merid occ.”
089.	020.0.		**Colias**	Fabricius, 1807	Papilio hyale Linné, 1758 (Syst. Nat. (ed. x), 1: 469), by designation under	Mag. f. Insektenk. (Illiger), 6: 284, no. 24.	(gender: feminine)

					the plenary power (Op. 146; Dir. 4 ICZN)		
089.	020.0.	001.0	**alfacariensis**	Ribbe, 1905	Colias hyale alfacariensis	Societas entomologica, 20 (18): 137 ruled under the plenary power to be an available name given precedence over Colias hyale sareptensis Alphéraky,1875, Colias hyale alba Rühl, 1893 and Colias hyale meridionalis Krulikowsky,1903 whenever it and any of the other three names are considered to be synonyms. (Op. 1657 and Op. 2180 ICZN).	[Spain: Andalusia:] Sierra de Alfacar, 1800 m
089.	020.0.	001.1		**calida**	Colias hyale ra. calida Verity, 1916	Entomologist's Rec. J. Var., 28: 99 (see Op. 1657 ICZN).	[Italy: Toscana: Arezzo:] Val d'Arno superiore: Camaldoli (Rhop. Pal., 2l, Pl. 40, Figs 41, 46)
089.	020.0.	001.2		**australis**	Colias hyale ra. australis Verity, 1911	Rhopalocera palaearctica, 1: 347 (see Op. 1657 ICZN).	Spain: Andalusia
089.	020.0.	002.0	**crocea**	(Fourcroy, 1785)	Papilio croceus	Entomologia parisiensis, 2: 250, no. 48.	[France:] Paris
				edusa (Fabricius, 1787)	Papilio edusa. Junior primary homonym of Papilio edusa Fabricius, 1777 Genera Insectorum, p. 255, no. 126-27 (currently Pieris edusa).	Mantissa Insectorum 2: 23, no. 240.	Habitat in Hispania.
089.	020.0.	003.0	**hyale**	(Linné, 1758)	Papilio hyale	Syst. nat. (ed. x), 1: 469, no. 71 (Dir. 4; Op. 146 ICZN).	"Europa, Africa" (England: Bocking, Canterbury: LTR Verity 1947 Farfalle diurne d'Italia, 3: 256)
089.	020.0.	004.0	**palaeno**	(Linné, 1761)	Papilio palaeno	Fauna Svecica (ed. 2), p. 272, no. 1041.	"Sweden: Uppsala"
089.	020.0.	004.1		**europomene**	Colias palaeno europomene Ochsenheimer, 1816	Schmett. Eur., 4: 157.	"aus der Schweiz"
089.	020.0.	005.0	**phicomone**	(Esper, [1780])	P.[apilio] phicomone	Die Schmetterlinge in Abbildungen nach der Natur..., 1 (2) Der europ. Schmett., Forts. Tagschmett., p. 32, Pl. 56, Fig. 1	[Austria:] Steiermark
089.	021.0.		**Gonepteryx**	[Leach], [1815]	Papilio rhamni Linné, 1758 Syst. nat. (ed. x), 1: 470. By monotypy.	In: Brewster, The Edinburgh Encyclopedia, 9 (1): 127.	(gender: feminine)
089.	021.1.			Rhodocera Boisduval & Le Conte, [1830]	Replacement name for Gonepteryx Leach, [1815], as too similar in spelling to Goneptera Latreille. Unnecessary substitution	Hist. gén. Lépid. Amér. sept., (8): 70.	(gender: feminine)
089.	021.0.	001.0	**cleopatra**	(Linné, 1767)	Papilio cleopatra	Syst. nat. (ed. xii), 1 (2): 765, no. 105.	"Barbaria" [Algeria: Algeri LTR Verity 1947 Farfalle diurne d'Italia, 3: 295]
089.	021.0.	002.0	**rhamni**	(Linné, 1758)	Papilio rhamni	Syst. nat. (ed. x), 1: 470, no. 73.	"Europa, Africa" [Sweden: LTR

							Verity 1947 Farfalle diurne d'Italia, 3: 301]
89.	022.0.		**Leptidea**	Billberg, 1820	Papilio sinapis Linné, 1758 (Syst. Nat. (ed. x), 1: 468), by monotypy (Op. 584 ICZN).	Enum. Ins. Mus. Billberg, p. 76.	(gender: feminine)
89.	022.1.			Leucophasia Stephens, 1828. Objective synonym of Leptidea (Op. 584 ICZN).	Papilio sinapis Linné, 1758 (Syst. Nat. (ed. x), 1: 468), by monotypy.	Ill. brit. Entomol., Haustellata, 1: 24, no. 5.	(gender: feminine)
089.	022.0.	001.0	**sinapis**	(Linné, 1758)	Papilio sinapis	Syst. nat. (ed. x), 1: 468, no. 61 (Op. 584 ICZN).	Not stated [Sweden: LTR Verity 1947 Farfalle diurne d'Italia, 3: 121]
089.	022.0	002.0	**juvernica**	Williams, 1946	Leptidea sinapis juvernica	Entomologist, 79 (992): 1.	Ireland: Kildare.
089.	022.0	003.0	**reali**	Reissinger, [1990]	Leptidea sinapsi reali	Atalanta, 20 (1 4): 173 (1989). Replacement name for Leptidea duponcheli lorkovici Réal, 1988 Mém. Comité Liaison Rech. Écofaun. Jura, (4): 17 28, primary homonym of Leptidea duponcheli lorkovici Pfeiiffer, 1932 Mitt. Münch. ent. Ges., 22 (1): 20.	France: Jura
089.	023.0.		**Hamearis**	Hübner, [1819]	Papilio lucina Linné, 1758 Syst. nat. (ed. x), 1: 480. By selection by Curtis, 1830 British Entomology, 7: 316.	Verz. bekannt. Schmett., (2): 19.	(gender: feminine)
089.	023.1.			Nemeobius Stephens, 1827. Objective synonym of Hamearis Hübner, [1819].	Papilio lucina Linné, 1758 Syst. nat. (ed. x), 1: 480. By monotypy (and by selection by Curtis, 1830 British Entomology, 7: 316).	Ill. brit. ent., Haustellata, 1: 28.	(gender: masculine)
089.	023.0.	001.0	**lucina**	(Linné, 1758)	Papilio lucina	Syst. nat. (ed. x), 1: 480, no. 135.	"Europa" [England: Cambridge and London: LTR Verity 1943 Farfalle diurne d'Italia, 2: 385)
089.	024.0.		**Lycaena**	Fabricius, 1807	Papilio phlaeas Linné, 1761 Fauna Svecica (ed. 2), p. 285. By selection by Curtis, 1830 British Entomology, 5: Pl. 12 (Dir. 4 ICZN)	Mag. f. Insektenk. (Illiger), 6: 285, no. 32.	(gender: feminine)
089.	024.1.			**Heodes** Dalmen, 1816	Lycaena virgaureae Linné, 1758 Syst. nat. (ed. x), 1: 484. By monotypy	K. svenska VetenskAkad. Handl., 1816 (1): 63, 91.	(gender: masculine)
089.	024.2.			"Chrysophanus" Auctorum, nec Hübner, [1818] (Name suppressed under the plenary power for the purposes of the Principle of Priority but not for those of the Principle of Homonymy (Op. 541	Chrysophanus mopsus Hübner, [1818] Zutr. z. Samml. exot. Schmett., 1: 24, no. 68, Pl. 24, Figs 135, 136. TL: aus Georgien in Florida. By selection by Riley, 1922, J. Bombay nat. Hist. Soc., 28: 472. (currently Satyrium titus)	Zutr. z. Samml. exot. Schmett., 1: 24, no. 68.	(gender: masculine)

				ICZN).			
089.	024.3.			**Helleia** Verity, 1943	Papilio helle [Denis & Schiffermüller], 1775 Ankündung syst. Werkes Schmett. wiener Geg., p. 181. By original designation.	Farfalle diurne d'Italia, 2: 20, 48.	(gender: feminine)
089.	024.4.			Disparia Verity, 1943 Junior homonym of Disparia Nagano, 1916 Bull. Nawa ent. Lab., 1: 3 (Lep. Notodontidae).	Papilio dispar [Haworth], 1802. By original designation.	Farfalle diurne d'Italia, 2: 21.	(gender: feminine)
089.	024.5.			**Thersamolycaena** Verity, 1957 Replacement name for Disparia Verity, 1943. Junior homonym of Disparia Nagano, 1916 Bull. Nawa ent. Lab., 1: 3 (Lep. Notodontidae)	Papilio dispar [Haworth], 1802. by replacement (Art. 67.8 ICZN)	Entomologist's Rec. J. Var., 69: 225.	(gender: feminine)
089.	024.6.			Rapsidia Sibatani, 1974. Replacement name for Disparia Verity, 1943; objective synonym of Thersamonolycaena Verity, 1957	Papilio dispar [Haworth], 1802. by replacement (Art. 67.8 ICZN)	J. austr. ent. Soc., 13 (2): 109.	(gender: feminine)
089.	024.7.			**Thersamonia** Verity, 1919	Papilio thersamon Esper, [1784] Die Schmetterlinge in Abbildungen nach der Natur..., 1 (2) Der europ. Schmett., Forts. Tagschmett., p. 176, Pl. 39 [recte 89], Fig. 6. By original designation.	Entomologist's Rec. J. Var., 31: 28.	(gender: feminine)
089.	024.8.			**Palaeochrysophanus** Verity, 1943	Papilio hippothoe Linné, 1761 Fauna Svecica (ed. 2), p. 274. By original designation.	Farfalle diurne d'Italia, 2: 23, 64.	(gender: masculine)
089.	024.0.	001.0	**alciphron**	(Rottemburg, 1775)	Pap.[ilio] alciphron	Der Naturforscher, Halle, 6: 11, no. 45 (2).	[Germany: Berlin]
089.	024.0.	001.1		**columbanus**	Pap.[ilio] columbanus de Prunner, 1798	Lepidoptera pedemontana, p. 76, no. 162.	[Italy: Piemonte] "in montibus rarus"
089.	024.0.	002.0	**dispar**	([Haworth], 180**2**)	Papilio dispar	Prodromus Lepidopterorum britannicorum, p. 3, no. 44 and foot note.	"in Anglia … et olim in Wallia [Wales]" [Cambridgeshire LTR Haworth, 1803 Lepid britann., p 40, no. 51]
089.	024.0.	003.1	**eurydame**	(Hoffmansegg, 1806)	Papilio eurydame. Replacement name for Papilio eurydice [sic! recte euridice] Hübner, [1800], Samml. europ. Schmett., Pl. Pap. 68, Figs 339-342 and [1806] text p. 53, no. 35; a primary homonym of Papilio euridice Rottemburg, 1775 (Der Naturforscher, 6: 28, no. 16; currently Lycaena hippothoe). A nomen protectum: (Art. 23.9.2)	Mag. f. Insektenk. (Illiger), 5: 178.	"Italien" (by replacement: Art. 67.8 ICZN) [Italy:] Piemonte and [Switzerland:] Geneva [the latter designation is invalid] (by selection by Verity, 1943, Farfalle diurne d'Italia, 4: 71).

089.	024.0.	003.0		xenophon	P.[apilio] xenophon de Loche, 1801. A nomen oblitum: (Art. 23.9.2).	Mem. R. Accad. Sci. Torino, 11: 149, no. 10, Pl. 8, Fig. 10.	[Italy: Piemonte]: "Il se trouve sur les Alpes à de grandes hauteurs"
089.	024.0.	004.0	**hippothoe**	(Linné, 1761)	Papilio hippothoë [sic!]	Fauna Svecica (ed. 2), p. 274, no. 1046.	"apud nos" [Sweden: Stockholm]
089.	024.0.	004.1		chryseis	Papilio chryseis Denis & Schiffermüller], 1775. Junior primary homonym of Papilio chryseis Drury, [1773].Ill. exot. ent., 1: 24, Pl 12, Figs 3, 4 (name in the Index, on p. [131]). (currently Catopsilia pyranthe)	Ankündung syst. Werkes Schmett. wiener Geg., p. 181 no. 3.	[Austria:] Wien. By implication (wiener Gegend)
089.	024.0.	005.0	**italica**	(Calberla, 1887)	Polyommatus hippothoe var. italica	CorrBl. ent. Ver. "Iris", 4 (1887): 126.	[Italy, Abruzzo:] Gran Sasso 1500 m
089.	024.0.	006.0	**phlaeas**	(Linné, 1761)	Papilio phlaeas	Fauna Svecica (ed. 2), p. 285, no. 1078.	[Sweden: Svealand]: Westermannia
089.	024.0.	007.0	**subalpina**	(Speyer, 1851)	Polyommatus circe var. subalpina	Stettin. ent. Ztg., 12: 339.	[Austria:] Innsbruck; Patscher Kofel
089.	024.0.	008.0	**thersamon**	(Esper, [1784])	P.[apilio] thersamon	Die Schmetterlinge in Abbildungen nach der Natur..., 1 (2) Der europ. Schmett., Forts. Tagschmett., p. 176, Pl. 39 [recte 89], Fig. 6.	[Russia:] Sarepta [=Krasnoarmeysk, by Volgograd]
089.	024.0.	009.0	**tityrus**	(Poda, 1761)	[Papilio] tityrus	Insecta musei graecensis, p. 77, no. 46.	[Austria:] "Graecia" (by implication) [=Steiermark: Graz]
089.	024.0.	009.1		**dorilis**	Papilio dorilis Hufnagel, 1766	Berlinisches Mag., 2: 68, no. 21.	[Germany: Berlin:] "hiesigen Gegend"
089.	024.0.	010.0	**virgaureae**	(Linné, 1758)	Papilio virgaureae	Syst. nat. (ed. x), 1: 484, no. 161.	"Europa, Africa" [[Sweden: Svealand:] Westermannia LTR Verity 1943 Farfalle diurne d'Italia, 2: 24]
089.	024.0.	011.0	**helle**	([Denis & Schiffermüller], 1775)	P.[apilio] helle	Ankündung syst. Werkes Schmett. wiener Geg., p. 181, no. 4.	[Austria:] Wien. By implication (wiener Gegend)
089.	024.0.	011.1		**amphidamas**	P.[apilio] amphidamas Esper, [1781]	Die Schmetterlinge in Abbildungen nach der Natur..., 1 (2) Der europ. Schmett., Forts. Tagschmett., p. 46, Pl. 58, Fig. 3; p. 82; Pl. 63, Fig. 5.	[Germany:] Sachsen, Leipzig
089.	025.0.		**Thecla**	Fabricius, 1807	Papilio betulae Linné, 1758 Syst. nat. (ed. x), 1: 482. By selection by Swainson, [1821] Zool. Illustr., (1) 2: 482 (Dir. 4 ICZN)	Mag. f. Insektenk. (Illiger), 6: 286, no. 35.	(gender: feminine)
089.	025.1.			Zephyrus Dalman, 1816. Objective synonym of Thecla Fabricius, 1807	Papilio betulae Linné, 1758 Syst. nat. (ed. x), 1: 482. By original designation ("Generis Typus Z. betulae")	K. svenska VetenskAkad. Handl., (1): 62, 63.	(gender: masculine)
089.	025.2.			Ruralis Tutt, 1906. Objective synonym of Thecla Fabricius, 1807.	Papilio betulae Linné, 1758 Syst. nat. (ed. x), 1: 482. By original designation.	Entomologist's Rec. J. Var., 18: 130.	(gender: masculine)

089.	025.0.	001.0	**betulae**	(Linné, 1758)	Papilio betulae	Syst. nat. (ed. x), 1: 482, no. 146.	Not stated [Sweden: Småland: LTR Verity 1943 Farfalle diurne d'Italia, 2: 347]
089.	025a.0.		**Favonius**	Sibatani & Ito, 1942	Dipsas orientalis Murray, 1875 Entomologist's month. Mag., 11: 169. By original designation.	Tenthredo, 3 (4): 327.	(gender: masculine)
089.	025a.1.			**Quercusia** Verity, 1943	Papilio quercus Linné, 1758 Syst. nat. (ed. x), 1: 482. By original designation.	Farfalle diurne d'Italia, 2: 343.	(gender: feminine)
089.	025a.0.	001.0	**quercus**	(Linné, 1758)	Papilio quercus	Syst. nat. (ed. x), 1: 482, no. 148.	Not stated [England: LTR Verity 1943 Farfalle diurne d'Italia, 2: 344]
089.	026.0.		**Satyrium**	Scudder, 1876	Lycaena fuliginosa Edwards, 1861 Proc. Acad. nat. Sci. Philad., 1861: 164. By original designation	Bull. Buffalo Soc. Nat. Sci., 3: 106.	(gender: neutre)
089.	026.1.			"Strymon" Auctorum nec Hübner, 1818	Papilio melinus Hübner, 1818, Zutr. z. Samml. exot. Schmett., 1: 22, no. 61 (TL "aus Georgien in Florida"). By selection by Riley, 1922 J. Bombay nat. Hist. Soc., 28: 472.	Zutr. z. Samml. exot. Schmett., 1: 22, no. 61.	(gender: masculine)
089.	026.2.			**Nordmannia** Tutt, [1907]	Lycaena myrtale Klug, 1834 In Ehrenberg Sym. Phys. Ins., 4: 1, Pl. 40, Figs 15, 16. By original designation.	Nat. Hist. Brit. Butts., 2: 143.	(gender: feminine)
089.	026.3.			**Strymonidia** Tutt. [1908] Replacement name for Leechia Tutt, [1907] Nat. Hist. Brit. Butts., 2: 142. Junior homonym of Leechia South, 1901 Trans. ent. Soc. London, 1901: 400 (Lep. Crambiidae)	Thecla thalia Leech, [1893] Butts of China, Japan and Corea, 2: 367, Pl. 3, 4. by replacement (Art. 67.8 ICZN).	Nat. Hist. Brit. Butts., 2: 483.	(gender: feminine)
089.	026.4.			**Chattendenia** Tutt, 1908 Replacement name for Edwardsia Tutt, [1907] Nat. Hist. Brit. Butts., 2: 144, Junior homonym of Edwardsia Costa, [1838] Fauna del Regno di Napoli, [2], [1/2] Entomostr. Pecilop., p. 1 [3], Pl 1. TS E. fulgens (Crustacea: Copepoda).	Papilio w-album Knoch, 1782 Beitr. Insektengesch., 2: 85, Pl. 6, Figs 1, 2. by replacement (Art. 67.8 ICZN).	Nat. Hist. Brit. Butts., 2: 483.	(gender: feminine)
089.	026.5			**Fixenia** Tutt, [1907]	Thecla herzi Fixsen. 1887. In Romanoff, Mém. Lép. 3: 279. no. 23, Pl 13, Fig. 4. LT: Korea. By original designation.	Nat. Hist. Brit. Butts 2: 142.	(gender: feminine)

089.	026.0.	001.0	**acaciae**	(Fabricius, 1787)	Papilio acaciae	Mantissa Insectorum, 2: 69, no. 655.	"Russia meridionalis"
089.	026.0.	002.0	**esculi**	(Hübner, [1804])	[Papilio] esculi	Samml. europ. Schmett., Pl. Pap. 109, Figs 559, 560; text: [1806] 1: 57, no. 48.	"Portugall"
089.	026.0.	003.0	**ilicis**	(Esper, [1778])	P.[apilio] ilicis	Die Schmetterlinge in Abbildungen nach der Natur..., 1 [1] Die Tagschmetterlinge, Pl. 39, Fig. 1b, text [1779] p. 353.	[Germany, Mittelfranken:] "Uffenheim"
089.	026.0.	004.0	**pruni**	(Linné, 1758)	Papilio pruni	Syst. nat. (ed. x), 1: 482, no. 147.	Not stated (Germany: LTR Verity 1943 Farfalle diurne d'Italia, 2: 371)
089.	026.0.	005.0	**spini**	(Fabricius, 1787)	Papilio spini	Mantissa Insectorum, 2: 68, no. 651.	"Habitat in Germaniae Pruno spinosa. Dom. Schiffermüller"
089.	026.0.	005.1		spini	P.[apilio] spini ([Denis & Schiffermüller], 1775) Nomen Nudum (see Kudrna & Belicek, 2005 Oedippus, 23: 26)	Ankündung syst. Werkes Schmett. wiener Geg., p. 186, no. 5.	[Austria:] Wien. By implication (wiener Gegend)
089.	026.0.	005.2		lynceus	Papilio lynceus Esper, [1779]. A junior primary homonym of Papilio lynceus Drury, [1773], Ill. Nat. Hist., 2, p. [91] index, Pl 7, Fig. 1; description on p. 12 (currently Idea lyncea) LT: Island of Johanna [= Comoros Anjouan] ex errore [recte Sumatra?].	Die Schmetterlinge in Abbildungen nach der Natur..., 1 [1] Die Tagschmetterlinge, text [1779] p.356; name created for Pl. 39, Fig. 3 (as P. quercus Variet.).	"in unserem Lande gefunden" [Germany; Bayern: Erlangen]
089.	026.0.	006.0	**w-album**	(Knoch, 1782)	Papilio w-album	Beitr. Insektengesch., 2: 85, no. 1; Pl. 6, Figs 1, 2.	[Germany:] Leipzig
089.	027.0.		**Callophrys**	Billberg, 1820	Papilio rubi Linné, 1758 Syst. nat. (ed. x), 1: 482. By selection by Scudder, 1875, Proc. amer. Acad. Arts Sci., Boston, 10: 132	Enumer. Insect. Mus. Nillberg, p. 80.	(gender: feminine)
089.	027.0.	001.0	**rubi**	(Linné, 1758)	Papilio rubi	Syst. nat. (ed. x), 1: 482, no. 147.	Not stated [Sweden: LTR Verity 1943 Farfalle diurne d'Italia, 2: 375]
089.	027.0	002.0	**avis**	Chapman, 1909	Callophrys avis	Entomologist's Rec. J. Var., 21 (6): 130.	[France:] Var [: Hyères]; Pyrénées Orientales
089.	028.0.		**Leptotes**	Scudder, 1876	Lycaena theonus Lucas, 1857 In Sagra: Hist. fis. pol. nat. Isla Cuba, 7: 611, Pl. Art. 16, Fig. 8, 8A, 8B. By original designation.	Bull. Buffalo Soc. nat. Sci., 3: 124	(gender: masculine)
089.	028.0.			**Syntarucus** Butler, [1901]	Papilio telicanus Lang, 1789 Verz. Schmett. Gegend Augsburg (ed. 2), p. 47	Proc. zool. Soc. Lond., 1900 (4): 929.	(gender: masculine)
089.	028.0.	001.0	**pirithous**	(Linné, 1767)	Papilio pirithous	Syst. nat. (ed.xii), 1 (2): 790, no. 235.	"Algiriae"
089.	028.0.	001.1		**telicanus**	Papilio telicanus Lang, 1789	Verz. Schmett. Gegend um Augsburg gesammelt... (ed. 2), p. 47, no. 387-389.	Southern France

089	028.a.		**Cacyreus**	Butler, [1898]	Papilio lingeus Stoll, [1782] In Cramer: Uitl. Kapellen, 4 (32): 176, Pl. 379, Figs F, G. By original designation. Substitution name for Hyreus Hübner, [1819] Verz. bekannt. Schmett., (5): 70, junior homonym of Hyreus Stephens, 1816 (Aves). (See also Op. 516 ICZN).	Proc. zool. Soc. Lond., 1897 (4): 845.	(gender: masculine)
089	028.a.	001.0	**marshalli**	Butler, [1898]	Cacyreus marshalli	Proc. zool. Soc. Lond., 1897 (4): 845, Pl. 50, Fig. 5.	[Kwazulu-] Natal: Estcourt
089	028.b.		**Azanus**	Moore, [1881]	In: Cramer. Uitl. Kapellen, 4(33): 209, Pl. 390, Figs L, M. LT: « Côte de Coromandel ». By original designation	Lep. Ceylon 1(2): 79.	(gender: masculine)
089	028.b.	001.0	**ubaldus**	(Stoll, [1782])	Papilio ubaldus	Stoll, [1782] – In: Cramer. Uitl. Kapellen, 4(33): 209, Pl. 390, Figs L,M.	Côte de Coromandel
089.	029.0		**Lampides**	Hübner, [1819]	Papilio boeticus Linné, 767 Syst. nat. (ed.xii), 1 (2): 789. By selection by Grote, 1873 Bull. Buffalo Soc. nat. Sci., (3): 179	Verz. bekannt. Schmett., (5): 70.	(gender: masculine)
089.	029.1			Cosmolyce Toxopeus, 1927. Objective synonym of Lampides Hübner, [1819]	Papilio boeticus Linné, 767 Syst. nat. (ed.xii), 1 (2): 789. By selection by Grote, 1873 Bull. Buffalo Soc. nat. Sci., (3): 179.	Tijdschr. ent., 70: 268 (foot note).	(gender: feminine)
089.	029.0	001.0	**boeticus**	(Linné, 1767)	Papilio boeticus	Syst. nat. (ed.xii), 1 (2): 789, no. 226.	"Barbaria" (=Algeria)
089.	029.a.		**Zizeeria**	Chapman, 1910	Polyommatus karsandra Moore, 1865 Moore, 1865 Proc. zool. Soc. Lond., 1865 (2): 505. By original designation.	Trans. ent. Soc. Lond., 1910: 480, 482.	(gender: feminine)
089.	029.a.	001.0	**karsandra**	(Moore, 1865)	Polyommatus karsandra	Proc. zool. Soc. Lond., 1865 (2)(33): 505, Pl. 31, Fig. 7.	NW India: Ebenen
089.	030.0.		**Cupido**	Schrank, 1801	Papilio minimus Fuessly, 1775 (Verz. bekannt. schweiz. Ins., p. 31), by designation under the plenary power. (Op. 503 ICZN)	Fauna boica, 2 (1): 153	(gender: masculine)
089.	030.1.			**Everes** Hübner, [1819]	Papilio amyntas [Denis & Schiffermüller], 1775 Ankündung syst. Werks Schmett. Wien. Geg., p. 185. By selection by Scudder, 1872, 4th annl Rept Peabody Acad. Sci., 1871: 56.	Verz. bekannt. Schmett., (5): 69.	(gender: masculine)
089.	030.0.	001.0	**alcetas**	(Hoffmansegg, 1804)	Papilio alcetas Replacement name for Papilio tiresias Hübner, [1800] Samml. europ. Schmett., Pl. Pap. 65, Figs 319-321; primary homonym of Papilio tiresias Rottemburg, 1775 Der Naturforscher, 6: 23)	Mag. f. Insektenk. (Illiger), 3: 205.	Austria (by replacement (Art. 72.7; 76.1 ICZN))
089.	030.0.	002.0	**argiades**	(Pallas, 1771)	Papilio argiades	Reise verschied Prov. Russisch.	"Russia" [Volga area]

						Reichs, 1: 472, no. 66 (see Op. 503 ICZN).	
089.	030.0.	002.1		amyntas	Papilio amyntas [Denis & Schiffermüller], 1775 Primary homonym of Papilio amyntas Pallas, 1771 Reise verschied Prov. Russisch. Reichs, 1: 472.	Ankündung syst. Werks Schmett. Wien. Geg., p. 185, no. 18.	[Austria:] Wien. By implication (wiener Gegend)
089.	030.0.	003.0	**minimus**	(Fuessly, 1775)	Papilio minimus	Verz. bekannt. schweiz. Ins., p. 31 (Op. 503 ICZN).	Switzerland (by implication)
089.	030.0.	004.0	**osiris**	(Meigen, 1829)	Polyommatus osiris	Syst. Beschreib. eur. Schmett., 2 (1): 7, no. 8, Pl. 46, Figs 3 a, b.	Not stated [Europe by implication]
089.	030.0.	004.1		sebrus	Papilio sebrus Hübner, [1824] Name suppressed under the plenary power for the purposes of the Principle of Priority but not for those of the Principle of Homonymy (Op. 970 ICZN).	Samml. europ. Schmett., Pl. Pap. 172, Figs 851-854, no text.	"Europa" (by implication)
089.	031.0.		**Celastrina**	Tutt, 1906	Papilio argiolus Linné, 1758 Syst. nat. (ed. x), 1: 483. By original designation.	Entomologist's Rec. J. Var, 18: 131.	(gender: feminine)
089.	031.1.			"Lycaenopsis" Auctorum, nec Felder & Felder, 1865	Lycaenopsis ananga Felder & Felder, [1865] Reise Fregatte «Novara» um Erde, Lep. Rhop., p. 257. (currently Lycaenopsis haraldus LT "India orientalis") By monotypy.	Reise Fregatte «Novara» um Erde, Lep. Rhop., p. 257.	(gender: feminine)
089.	031.0.	001.0	**argiolus**	(Linné, 1758)	Papilio argiolus	Syst. nat. (ed. x), 1: 483, no. 153.	"Europa" [England: Enfield: LTR Verity 1943 Farfalle diurne d'Italia, 2: 102]
089.	032.0.		**Pseudophilotes**	Beuret, 1958	Papilio baton Bergsträsser, 1779 Nomencl. beschreib. Insek. Grafsch. Hanau, 3: 18, Pl. 60, Figs 6 8. By original designation.	Mitt. ent. Ges. Basel (n. f.), 8 (6): 100.	(gender: masculine)
089.	032.1.			"Philotes" Auctorum nec Scudder, 1876	Lycaena regia Boisduval, 1869 Ann. Soc. ent. Belg., 12: 46 (currently P. sonorensis). By original designation.	Bull. Buffalo Soc. nat. Sci., 3: 116.	(gender: masculine)
089.	032.0.	001.0	**barbagiae**	Prins & Poorten, 1982	Pseudophilotes barbagiae	Phegea, 10 (2): 68.	[Italy:] Sardinia: province of Nuoro, 1000 m
089.	032.0.	002.0	**baton**	(Bergsträsser, 1779)	[Papilio] baton	Nomencl. beschreib. Insek. Grafsch. Hanau, 3: 18; [1780], Pl. 60, Figs 6-8.	[Germany. Bayern:] Hanau (by implication)
089.	032.0.	003.0	**vicrama**	(Moore, 1865)	Polyommatus vicrama	Proc. zool. Soc. Lond., 1865 (2): 505, Pl. 31, Fig. 6.	[N India:] NW Himalayas: Kunawur: Cheene; Tibet: in the mountains above Shipkee
089.	032.0.	003.1		**schiffermuelleri**	Turanana vicrama schiffemülleri [sic!] Hemming, 1929 Replacement name (?) for Papilio hylas [Denis & Schiffermüller], 1775 Ankündung syst. Werks Schmett. Wien. Geg., p. 185.	Entomologist, 62: 61, Pl. 1, Fig. 6 8; Pl. 2, Fig. 19 22.	Lower Austria: Altenburg (LTR? The type locality of a species group Replacement name is the type locality of the substituted name, since both names have the same name bearing

							type (Art. 72.7 ICZN). It is not clear, in this case, if Hemming intended to describe a totally new subspecies).
089.	033.0.		**Scolitantides**	Hübner, [1819]	Papilio battus [Denis & Schiffermüller], 1775, Ankündung syst. Werks Schmett. Wien. Geg., p. 185. By selection by Hemming, 1934 Generic Names hol. Butts, 1: 110	Verz. bekannt. Schmett., (5): 68.	(gender: masculine)
089.	033.0.	001.0	**orion**	(Pallas, 1771)	Papilio orion	Reise verschied Prov. russisch. Reichs, 1: 471, no. 65.	"Russia" [Volga area]
089.	034.0.		**Glaucopsyche**	Scudder, 1872	Polyommatus lygdamus Doubleday, 1841 Entomologist, 1: 209. By original designation	4th annl Rept Peabody Acad. Sci., 1871: 54.	(gender: feminine)
089.	034.0.	001.0	**alexis**	(Poda, 1761)	[Papilio] alexis	Insecta musei graecensis, p. 77, no. 47.	[Austria:] "Graecia" (by implication) [=Steiermark: Graz]
089.	034.0.	001.1		**cyllarus**	Papilio cyllarus Rottemburg, 1775	Der Naturforscher, 6: 20, no. 7.	[Germany: Berlin]
089.	034.0.	002.0	**melanops**	(Boisduval, [1828])	Polyommatus melanops	Europaeorum lepidopterorum index methodicus, 1: 13 (Op. 972 ICZN).	Galloprov. Aix [= France, Provence: Aix en Provence]
089.	035.0.		**Maculinea**	van Eecke, 1915	Papilio alcon [Denis & Schiffermüller], 1775 Ankündung syst. Werks Schmett. Wien. Geg., p. 182. By selection by Graves, 1928 (Entomol. Rec., 40: 102) (Op. 503 ICZN)	Zool. Meded., 1: 28.	(gender: feminine)
089.	035.0.	001.0	**alcon**	([Denis & Schiffermüller], 1775)	P.[apilio] alcon	Ankündung syst. Werkes Schmett. wiener Geg., p. 182 no. 4 (Op. 503 ICZN).	Austria: Bgld. [= Burgenland]: Zitzmannsdorfer Wiesen (Neotype: Kudrna & Belicek, 2005 Oedippus, 23: 14).
089.	035.0.	002.0	**arion**	(Linné, 1758)	Papilio arion	Syst. nat. (ed. x), 1: 483, no. 151 (Op. 503 ICZN).	"Europa" [Germany: Nürnberg LTR Verity 1943 Farfalle diurne d'Italia, 2: 149]
089.	035.0.	003.0	**rebeli**	(Hirschke, 1905)	Lycaena alcon f. v. rebeli	Jber. wien. ent. Ver., 15: 109, Pl. 2, Figs 1, 2.	[Austria:] Alps of the Steiermark, 1700 m
089.	035.0.	004.0	**teleius**	(Bergsträsser, 1779)	[Papilio] teleius	Nomencl. beschreib. Insek. Grafsch. Hanau, 2: 71, Pl. 43, Figs 5, 6.	[Germany. Bayern:] Hanau (by implication)
089.	035.0.	004.1		**euphemus**	Papilio euphemus Hübner, [1800]	Samml. europ. Schmett., Pl. Pap. 54, Figs 257-259; text [1806] 1: 44, no. 3.	[Germany:] "Sachsen"
089.	036.0.		**Iolana**	Bethune-Baker, 1914	Lycaena iolas Ochsenheimer, 1816 Schmett. Eur., (1) 4: 144. By original designation.	Entomologist's Rec. J. Var., 26: 162.	(gender: feminine)
089.	036.0.	001.0	**iolas**	(Ochsenheimer, 1816)	Lycaena iolas	Schmett. Eur., (1) 4: 144, no. 3.	"Ungarn" [: Buda LTR Boisduval, 1832 Icones historique Lepid Europe, p. 83]
089.	037.0.		**Plebejus**	Kluk, 1780	Papilio argus Linné, 1758 (Syst. Nat. (ed. x), 1: 483), as interpreted by reference to the male genitalia	Zwierzat Hist. nat. pocz. gospod., (2) 4: 89.	(gender: masculine)

					figured by Chapman, 1909 (in Tutt, Nat. Hist. brit. Butts, 3, Pl. 20, Fig. 1), by selection by Hemming, 1933 Entomologist, 66: 224 (Op. 269, 278 ICZN).		
089.	037.1.			Plebeius Kluk, 1780	Papilio argus Linné, 1758. Syst. nat., Ed. x, 1: 483, no. 152. By selection by Crotch 1872. Cistula ent., 1: 60. The spelling of this name (with a "j") was stabilised by Op. 269, 278 (ICZN)	Zwierzat Hist. nat. pocz. gospod., (1) 4: 89	(gender: masculine)
089.	037.2.			**Plebejides** Sauter, 1968	Lycaena pylaon Fischer de Waldheim, 1832, Nouv. Mém. Soc. Imp. Nat. Mosc., 2: 357. By original designation.	Mitt. ent. Ges. Basel, 18 (1): 4.	(gender: masculine)
089.	037.0.	001.0	**argus**	(Linné, 1758)	Papilio argus	Syst. nat. (ed. x), 1: 483, no. 152, as interpreted by reference to the male genitalia figured by Chapman, 1909 (in Tutt, Nat. Hist. brit. Butts, 3, Pl. 20, Fig. 1) (Op. 269 ICZN).	"Europa, Africa" [S Sweden: LTR Verity 1943 Farfalle diurne d'Italia, 2: 183]
089.	037.0.	001.1		**aegon**	Papilio aegon [Denis & Schiffermüller], 1775	Ank. syst. Werkes Schmett. Wiener Geg., p. 185, no. 15.	[Austria:] Wien. By implication (wiener Gegend)
089.	037.0.	002.0	**trappi**	(Verity, 1927)	Plebeius [sic!] sephyrus trappi. Replacement name for Lycaena lycidas Trapp, 1863 (Mitt. schweiz. ent. Ges., 1 (4): 103; LT: [Switzerland:] Wallis: Oberwallis [= Brig, Simplon]). Secondary homonym of Polyommatus lycidas Meigen, 1830 Syst. Bearb. eur. Schmett., 2: 32, no. 39, Pl. 49, Figs 4A, 4B. 4b (currently Lycaeides idas)(see Art. 59.3 ICZN)..	Annls Soc. ent. Fr., 96: 16.	Switzerland: Valais: Simplon Pass (by replacement (Art. 72.7; 76.1 ICZN)).
089.	038.0.		**Lycaeides**	Hübner, [1819]	Papilio argyrognomon Bergsträsser, [1779] Nomencl. beschr. Ins. Grafshaft Hanau Munzenberg, 2: 76, Pl. 46, Figs 1, 2. As interpreted by reference to the male genitalia figured by Chapman, 1917 In Oberthür, Études Lépidopt. comp., 14: Pl. 8, 23) (Op. 168, 269 ICZN)	Verz. bekannt. Schmett., (5): 69.	(gender: masculine)
089.	038.0.	001.0	**abetonicus**	(Verity, 1910)	Lycaena argus r. abetonica	Boll. Soc. ent. ital., 42: 273.	[Italy:] Toscana: Lucca: Passo dell'Abetone: Piramidi: 1400 m
089.	038.0.	002.0	**argyrognomon**	(Bergsträsser, 1779)	[Papilio] argyrognomon	Nomencl. beschreib. Insek. Grafsch. Hanau, 2: 76, Pl. 46, Figs 1, 2?;Pl. 51, Figs 7, 8. As interpreted by reference to the male genitalia figured by Chapman, 1917 (in Oberthür, Études Lépidopt. comp., 14: Pl. 8, Fig. 23)	[Germany, Bayern:] Hanau: forest of Bruchköbel ("Bruchköbler Walde")

						(Op. 269 ICZN).	
089.	038.0.	002.1		**ismenias**	Polyommatus ismenias Meigen, 1829	Syst. Beschr. europ. Schmett., 2: 33, no. 40, Pl. 49, Figs 5A-5D.	"Das Vaterland is mir unbekannt". ("Europe" by implication)
089.	038.0.	003.0	**corsicus**	(Tutt, 1909)	Plebeius [sic!] argyrognomon var. corsica	Entomologist's Rec. J. Var., 21: 59.	[France:] Corsica
089.	038.0.	003.1		**bellieri**	Lycaena argus ra. bellieri Oberthür, 1910	Études de Lépidoptèrologie comparée, 4: 190, 191, Pl. 40, Figs 280, 281.	[France:] Corsica: Bastelica
089.	038.0.	003.2		**villai**	Lycaeides villai Jutzeler, Leigheb, Manil, Villa & Volpe, 2003	Linn. belg., 19 (2): 69.	[Italy:] Isola d'Elba: Monte Capanne, 850 m
089.	038.0.	004.0	**idas**	(Linné, 1761)	Papilio idas as interpreted by reference to the male genitalia figured by Chapman, 1917 (in Oberthür, Études Lépidopt. Comp., 14: Pl 3, Fig. 7). Name conserved under the plenary power (Op. 269 ICZN).	Fauna Svecica (ed. 2), p. 284, no. 1075.	Sweden (by implication)
089.	039.0.		**Aricia**	[Reichenbach], 1817	Papilio agestis [Denis & Schiffermüller], 1775, Ank. syst. Werkes Schmett. wiener Geg., p. 184. By selection by Tutt, 1906. Entomologist's Rec. J. Var., 18: 131.	Jena allgem. Lit. Ztg., 14 (1): 280.	(gender: feminine)
089.	039.1.			**Pseudoaricia** Beuret, 1959	Polyommatus nicias Meigen, 1829, Syst. beschr. europ. Schmett., 2 (1): 10, Pl. 45, Figs 3A, 3B. By original designation.	Mitt. ent. Ges. Basel, (N. F.), 9: 84.	(gender: feminine)
089.	039.0.	001.0	**agestis**	([Denis & Schiffermüller], 1775)	P.[apilio] agestis	Ankündung syst. Werkes Schmett. wiener Geg., p. 184 no. 13.	[Austria:] Wien. By implication (wiener Gegend)
089.	039.0.	001.1		**astrarche**	[Papilio] astrarche Bergsträsser, 1779	Nomencl. beschreib. Insek. Grafsch. Hanau, 3: 4, Pl. 49, Figs 7, 8.	[Germany. Bayern:] Hanau (by implication).
089.	039.0.	001.2		medon	Papilio medon Hufnagel, 1766. Junior primary homonym of Papilio medon Linné, 1763, Amoenitates acad., 6: 402, no. 53, LT: "Habitat in Indiis" [recte: tropical Africa] (currently Euphaedra medon)	Berlin. Mag., 2: 78, no. 41.	[Germany: Berlin]
089.	039.0.	002.0	**allous**	(Geyer, [1837])	[Papilio] alloüs [sic!]	Samml. europ. Schmett., 1, Pl. Pap. 200, Figs 988-992.	[France:] Provence: Hochalp [= high mountains]. See Hemming (1937 Hübner. A bibliographical and systematic account…, 1: 219)[Allos?]
089.	039.0.	003.0	**cramera**	(Eschscholtz, 1821)	Lycaena cramera	In: Kotzebue. Entdeck. Reise Süd See u. Bering Str. Erforsch. Nordoestl. Durchf., 3: 217, Pl. 10, Figs 26A, 26B.	[Spain:] [Canary Islands]: Tenerife
089.	039.0.	004.0	**nicias**	(Meigen, 1830)	Polyommatus nicias	Syst. Beschr. eur. Schmett., 2 (1): 10, no. 13, Pl. 45, Figs 3a, 3b.	Italy. Alpi Retiche [=Rhetian Alps] (LTR Verity, 1943. Farfalle diurne d'Italia, 2: 216)
089.	040.0.		**Eumedonia**	Forster, 1938	Papilio eumedon Esper, [1780]. Die	Mitt. münch. ent. Ges., 28: 113.	(gender: feminine)

					Schmetterlinge in Abbildungen nach der Natur..., 1 (2) Der europ. Schmett., Forts. Tagschmett., p. 16, Pl. 52, Fig. 2. By original designation.		
089.	040.0.	001.0	**eumedon**	(Esper, [1780])	P.[apilio] eumedon	Die Schmetterlinge in Abbildungen nach der Natur..., 1 (2) Der europ. Schmett., Forts. Tagschmett., p. 16, Pl. 52, Fig. 2.	[Germany, Bayern:] Erlangen
089.	040.0.	001.1		chiron	Papilio chiron Rottemburg, 1775. Primary homonym of Papilio chiron Fabricius, 1775. Ent. syst., p. 452. (Op. 516 ICZN)	Der Naturforscher, Halle, 6: 27, no. 15.	[Poland:] Landsberg an der Warthe" (= Gorzów Wielkopolski)
089.	040.0.	001.1		**belinus**	Pap.[ilio] belinus de Prunner, 1798	Lepidoptera pedemontana, p. 77, no. 163.	[Italy: Piemonte: Bellino] (by implication) "in montibus rarus"
089.	041.0.		**Albulina**	Tutt, 1909	Papilio pheretes Hoffmansegg, 1804, Magazin Insektenk. (Illiger), 3: 187. Replacement name for [Papilio] atys Hübner, [1804] Samml. europ. Schmett.: Pl. 97, Figs 495, 496; Pl. 107, Figs 548, 549. By original designation	Nat. Hist. Brit. Butts, 3 (6): 154.	(gender: feminine)
089.	041.1.			**Vacciniina** Tutt, 1909.	Papilio optilete Knoch, 1781. Beitr. Insektenges., 1: 76. By original designation	Nat. Hist. Brit. Butts, 3 (6): 154.	(gender: feminine)
089.	041.0.	001.0	**optilete**	(Knoch, 1781)	Papilio optilete	Beitr. Insektengesch., 1: 76, Pl. 5, Figs 5, 6.	[Germany. Niedersachsen:] Brunswig [=Braunschweig]
089.	041.0.	002.0	**orbitulus**	(de Prunner, 1798)	Pap.[ilio] orbitulus	Lepidoptera pedemontana, p. 75, no. 158.	[Italy: Piemonte:] Monte Traversagne
089.	041.0.	002.1		**pheretes**	Papilio pheretes Hoffmansegg, 1804, Magazin Insektenk. (Illiger), 3: 187. Replacement name for [Papilio] atys Hübner, [1804] Samml. europ. Schmett.: Pl. 97, Figs 495, 496; Pl. 107, Figs 548, 549, Junior primary homonym of Papilio atys Cramer, [1780]-Uitl. Kapellen, 3 (22): 117, Pl. 259, Figs E, F [TL Surinam](currently Riojana atys)	Magazin Insektenk. (Illiger), 3: 187.	[Austria:] Alps of Tyrol and Switzerland (By replacement. The type locality was established by Hübner, [1806] Samml. europ. Schmett., text, p. 45, by implicitly accepting the Replacement of the name P. atys by P. pheretes Hoffmansegg)
089.	042.0.		**Agriades**	Hübner, [1819]	Papilio glandon Prunner, 1798 (Lepid. Pedemont., p. 76), by designation under the plenary power (Op. 168, 173, 270 ICZN)	Verz. bekannt. Schmett., (5): 68.	(gender: masculine)
089.	042.0.	001.0	**glandon**	(de Prunner, 1798)	Pap.[ilio] glandon (Op. 270 ICZN).	Lepidoptera pedemontana, p. 76, no. 159 (Op. 173, 270 ICZN).	[Italy: Piemonte:] "in montibus"
089.	043.0.		**Cyaniris**	Dalman, 1816	Cyaniris argianus Dalman, 1816. K.	K. svenska VetenskAkad. Handl., (1):	(gender: masculine (Art. 30 (a) (i)

					svenska VetenskAkad. Handl., (1): 63. By monotypy	63.	ICZN).
089.	043.0.	001.0	**semiargus**	(Rottemburg, 1775)	Pap.[ilio] semiargus	Der Naturforscher, Halle, 6: 20, no. 6.	[Germany: Sachsen:] “in den Garten und auf den Wiesen” [by Halle]
089.	043.0.	001.1		**frejus**	Pap.[ilio] frejus de Prunner, 1798	Lepidoptera pedemontana, p. 76, no. 160.	[France: Hautes Alpes: Fréjus] (by implication) "in montibus"
089.	044.0.		**Polyommatus**	Latreille, 1804	Papilio icarus Rottemburg, 1775 (Der Naturforscher, Halle, 6: 21), by designation under the plenary power (Op. 175, 270 and Dir. 96 ICZN)	Nouv. Dict. Hist. nat., 24 (Tab.): 185, 200.	(gender: masculine)
089.	044.1.			**Lysandra** Hemming, 1933.	Papilio coridon Poda, 1761. Insecta musei graecensis: 77. By Op. 429 ICZN.	Entomologist, 66: 277.	(gender: feminine)
089.	044.2.			**Plebicula** Higgins, 1969	Papilio dorylas [Denis & Schiffermüller], 1775. Ank. syst. Werkes Schmett. wiener Geg.: 322. By original designation	Entomologist, 102: 67.	(gender: feminine)
089.	044.3.			**Agrodiaetus** Hübner, 1822.	Papilio damon [Denis & Schiffermüller], 1775 Ank. syst. Werkes Schmett. wiener Geg.: 182. By selection by Hemming 1934. Generic Names Holarctic Butts, 1: 109.	Syst. alph. Verz., pp. 1-10.	(gender: masculine)
089.	044.4.			**Meleageria** Sagarra (de), 1925.	Papilio meleager Esper, [1778]. Die Schmetterlinge in Abbildungen nach der Natur..., 1 [1] Die Tagschmetterlinge, Pl. 45, Fig. 2, text [1779] p. 375, Pl. 62, Fig. 1 [1781].	Butll. Inst. catal. Hist. nat., (2) 5: 271.	(gender: feminine)
089.	044.0.	001.0	**icarius**	(Esper, [1789]).	Papilio icarius	Die Schmetterlinge in Abbildungen nach der Natur..., Suppl. Theil 1, p. 35, Pl. 99, Fig. 4 ♂.	[Sweden. Prov. of] Blekinge
089.	044.0.	001.1		**amandus**	Papilio amandus (Schneider, 1791)	Neuestes Mag. f. Liebh. Ent., 1 (4): 428, no. 10.	S. Sweden [Prov. Blekinge].
089.	044.0.	002.0	**bellargus**	(Rottemburg, 1775)	Pap.[ilio] bellargus	Der Naturforscher, Halle, 6: 25, no. 12.	[Germany: Sachsen:] "in hiesiger Gegend" [by Halle]
089.	044.0.	002.1		**adonis**	Papilio adonis [Denis & Schiffermüller], 1775.	Ankündung syst. Werkes Schmett. wiener Geg.: 184, no. 11.	[Austria:] Wien. By implication (wiener Gegend)
089.	044.0.	002.2		**thetis**	Papilio thetis Rottemburg, 1775. Primary homonym of Papilio thetis Drury, [1773] Ill. nat. Hist., 2 (index) and p. 16, Pl. 9, Figs 3, 4 (currently under Curetis).	Naturforscher, Halle, 6: 24, no. 11.	"Europa"
089.	044.0.	003.0	**coridon**	(Poda, 1761)	[Papilio] coridon	Insecta musei graecensis, p. 77, no. 48 (Op. 429 ICZN).	[Austria:] "Graecia" (by implication) [=Steiermark: Graz]
089.	044.0.	003.1		corydon	Papilio corydon [Denis & Schiffermüller], 1775 (Op. 429 ICZN)	Ankündung syst. Werkes Schmett. wiener Geg., p. 184, no. 6.	[Austria:] Wien. By implication (wiener Gegend)

089.	044.0.	003.2	**gennargenti**	(Leigheb, 1987)	Lysandra coridon ssp. gennargenti	Boll. Mus. regionale Sci. nat. Torino, **5** (2): 449, Figs 1, 2.	Italy: Sardinia: Barbagia di Seulo, 800 m
089.	044.0.	004.0	**damon**	([Denis & Schiffermüller], 1775)	P.[apilio] damon	Ankündung syst. Werkes Schmett. wiener Geg., p. 182, no. 6.	[Austria:] Wien. By implication (wiener Gegend)
089.	044.0.	005.0	**daphnis**	([Denis & Schiffermüller], 1775)	P.[apilio] daphnis	Ankündung syst. Werkes Schmett. wiener Geg., p. 182, no. 2.	[Austria:] Wien. By implication (wiener Gegend)
089.	044.0.	005.1		**meleager**	P.[apilio] meleager Esper, [1778].	Die Schmetterlinge in Abbildungen nach der Natur..., 1 [1] Die Tagschmetterlinge, Pl. 45, Fig. 2, text [1779] p. 375; [1781] Pl. 62, Fig. 1.	[Germany:] Sachsen
089.	044.0.	006.0	**dolus**	(Hübner, [1823])	[Papilio] dolus	Samml. europ. Schmett., Pl. Pap. 159, Figs 793-796.	"Europa" (by implication) [France: Provence LTR Oberthür, 1892, Bull. Séances Soc. ent. Fr, p. x]
089.	044.0.	007.0	**dorylas**	([Denis & Schiffermüller], 1775)	P.[apilio] dorylas	Ankündung syst. Werkes Schmett. wiener Geg., p. 322, no. 19.	[Austria:] Wien. By implication (wiener Gegend)
089.	044.0.	007.1		**argester**	Papilio argester Bergsträsser, 1779	Nomencl. beschreib. Insek. Grafsch. Hanau, 3: 15, Pl. 58, Figs 3, 4.	[Germany: Bayern:] Hanau (by implication)
089.	044.0.	007.1		hylas	Papilio hylas Esper, [1778] – Primary homonym of Papilio hylas [Denis & Schiffermüller], 1775 Ankündung syst. Werkes Schmett. wiener Geg., p. 185, no. 16 (currently Pseudophilotes baton)	Die Schmetterlinge in Abbildungen nach der Natur...,, 1 [1] Die Tagschmetterlinge, Pl. 45, Fig. 3 ♂, text [1779] p. 375.	[Germany:] Sachsen.
089.	044.0.	008.0	**eros**	(Ochsenheimer, 1808)	Papilio eros (nomen protectum: Art. 23.9.1.2 and 23.9.2).	Schmett. Europa, 1 (2): 42.	[Austria:] Tyrol and Alps of Switzerland
089.	044.0.	008.1		bramafama	Pap.[ilio] bramafama de Prunner, 1798 (nomen oblitum: Art. 23.9.2)	Lepidoptera pedemontana, p. 76, no. 161.	[Italy: Piemonte: Forte Bramafam] (by implication) "in montibus"
089.	044.0.	009.0	**escheri**	(Hübner, [1823])	[Papilio] escheri	Samml. europ. Schmett., Pl. Pap. 160, Figs 799, 800.	no text [France: Var: Ste Baume LTR Duponchel, 1823, Hist. nat. Lép. Fr., suppl. 1: 71].
089.	044.0.	009.1		**agestor**	Polyommatus agestor Godart, [1824].	In Latreille Encyclopédie méthodique, Histoire naturelle, 9 (Lépid) [2]: 614, no. 221.	[France.] Lozère; Toulon
089.	044.0.	010.0	**exuberans**	(Verity, 1926)	Hirsutina admetus ra. exuberans	Entomologist's Rec. J. Var., 38 (9): 121.	[Italy: Piemonte: Torino: Val Susa:] Oulx
089.	044.0.	011.0	**galloi**	(Balletto & Toso, 1979)	Agrodiaetus galloi	Nota lepid., 2 (1/2): 14, Figs 1, 2, 3C, 5C, 6E, 7.	[Italy:} Lucania: Potenza: Mt Pollino: Piano di Ruggio: 1550 m
089.	044.0.	012.0	**hispanus**	(Herrich-Schäffer, 1852)	Lycaena corydon var. hispana	Syst. Bearb. Schmett. Europa, 1: 7 (Index), Figs 500, 501.	Spain [: Catalunia]
089.	044.0.	013.0	**humedasae**	(Toso & Balletto, 1976)	Agrodiaetus humedasae	Annali Mus. civ. Storia nat. Giacomo Doria, 81: 125, Fig. 1.	[Italy:] Val d'Aosta: Cogne: [Pont d'Ael]: 800 900 m
089.	044.0.	014.0	**icarus**	(Rottemburg, 1775)	Pap.[ilio] icarus	Der Naturforscher, Halle, 6: 21, no. 8 (Op. 175, 270 and Dir. 96 ICZN; see also Op. 232).	[Germany: Sachsen:] "in den Garten und auf den Wiesen" [by Halle]
089.	044.0.	015.0	**ripartii**	(Freyer, [1831])	Papilio Lycaena ripartii	Beitr. Gesch. europ. Schmett., 3 (23): 128, no. 184, Pl. 133, Fig. 3.	Spain

089.	044.0.	015.1		**rippertii**	Polyommatus rippertii Boisduval, 1832.	Icones Historique des Lépidoptères nouveau ou peu connus. Collection des Papillons d'Europe, 1 (5/6): 68, Pl. 16, Figs 4 6.	[France: Alpes de Haute Provence:] Digne
089.	044.0.	015.2		**susae**	Agrodiaetus ripartii susae (Bertaccini, 2003)	Quaderni di studi di St. nat. Romagna, 17 (suppl.): 128.	Italy: Prov. Torino: Mompantero.
089.	044.0.	016.0	**thersites**	(Cantener, 1834)	[Argus] thersites	Hist. nat. Papillons diurnes Haut Bas Rhin, Moselle, Meurthe, Vosges, p. 53 [foot notes].	S. France
089.	044.0.	017.0	**virgilius**	(Oberthür, 1910)	Lycaena dolus ra. (f.) virgilia	Études de Lépidoptèrologie Comparée, 4: 263.	[Italy. Abruzzi: L'Aquila:] Sulmona
089.	044.0	018.0	**celinus**	(Austaut, 1879)	Lycaena celina	Petites Nouv. ent. 2 (11) (212): 293.	Algeria: Sidi Bel Abbès
089.	045.0.		**Nymphalis**	Kluk, 1780	Papilio polychloros Linné, 1758 (Syst. Nat. (ed. x), 1: 477), by selection by Hemming, 1933 (Entomologist, 66: 223) (Op. 278 ICZN)	Zwierz. Hist. nat. pocz. gospod., 4: 86.	(gender: feminine)
089.	045.0.			**Euvanessa** Scudder, 1889 Replacement name for Scudderia Grote, 1873 Can. Ent., 5: 144. Homonym of Scudderia Stål, 1873 Ofvers. VetenskAkad. Förh. Stockholm, 30: no.. 4: 41 (Orthoptera: Tettigoniidae).	Papilio antiopa Linné, 1758 Syst. nat. (ed. x), 1: 476 (by replacement: Art. 67.8 ICZN) Art. 67.1. ICZN)	Butts eastern U. S. Canada, (1) (3): 387.	(gender: feminine)
089.	045.0.	001.0	**antiopa**	(Linné, 1758)	Papilio antiopa	Syst. nat. (ed. x), 1: 476, no. 112,	"etiam in Americae" ("Sweden" by implication from reference to Fauna Suecica)
089.	045.0.	002.0	**polychloros**	(Linné, 1758)	Papilio polychloros	Syst. nat. (ed. x), 1: 477, no. 113 (Op. 278 ICZN).	Not stated [Sweden: LTR Verity 1950 Farfalle diurne d'Italia, 4: 353]
089.	046.0.		**Inachis**	Hübner, [1819]	Papilio io Linné, 1758 Syst. nat. (ed. x), 1: 472. By monotypy (as Inachis jo [sic!]).	Verz. bekannt. Schmett., (3): 37.	(gender: feminine)
089.	046.0.	001.0	**io**	(Linné, 1758)	Papilio io	Syst. nat. (ed. x), 1: 472, no. 88.	Not stated [Sweden: LTR Verity, 1950, Farfalle diurne d'Italia, 4: 359]
089.	047.0.		**Vanessa**	Fabricius, 1807	Papilio atalanta Linné, 1758 (Syst. Nat. (ed. x), 1: 478), by selection by Latreille 1810 (Consid. Gén. Anim. Crust. Arach. Ins., p. 440, 354). ruled under the plenary power to be given precedence over Cynthia Fabricius, 1807, whenever considered synonyms (see also Dir. 4 ICZN)	Mag. f. Insektenk. (Illiger), 6: 281, no. 12.	(gender: feminine)
089.	047.1.			**Cynthia** Fabricius, 1807	Papilio cardui Linné, 1758 Syst. nat.	Mag. f. Insektenk. (Illiger), 6: 281, no.	(gender: feminine)

					(ed. x), 1: 475, no. 107. By selection by Westwood, 1840 Introd. Class. Ins., 2, Generic Synopsis., p. 87. By direction under the plenary power, not to be used in preference to Vanessa Fabricius, 1807, but available for use by those who consider that the type species of this genus is not congeneric with Papilio atalanta Linné, 1758	11.	
089.	047.2.			Pyrameis Hübner, [1819]. Objective synonym of Vanessa Fabricius, 1807.	Papilio atalanta Linné, 1758 Syst. Nat. (ed. x), 1: 478, by selection by Scudder, 1875 Proc. amer. Acad. Arts Sci., Boston, 10: 260.	Verz. bekannt. Schmett., (3): 33.	(gender: feminine)
089.	047.0.	001.0	**atalanta**	(Linné, 1758)	Papilio atalanta	Syst. nat. (ed. x), 1: 478, no. 119 (Dir. 4 ICZN).	Not stated [Sweden: LTR Verity 1950 Farfalle diurne d'Italia, 4: 334]
089.	047.0.	002.0	**cardui**	(Linné, 1758)	Papilio cardui	Syst. nat. (ed. x), 1: 475, no. 107 (Dir. 4 ICZN).	"Europa, Africa" [Sweden: LTR Verity 1950 Farfalle diurne d'Italia, 4: 329]
089.	048.0.		**Araschnia**	Hübner, [1819]	Papilio levana Linné, 1758 Syst. nat. (ed. x), 1: 480. By selection by Scudder, 1875 Proc. amer. Acad. Arts Sci., Boston, 10: 117.	Verz. bekannt. Schmett., (3): 37.	(gender: feminine)
089.	048.0.	001.0	**levana**	(Linné, 1758)	Papilio levana	Syst. nat. (ed. x), 1: 480, no. 133.	"Europa australiori", but "Germany" is indicated for Papilio prorsa (p .480, no. 134)
089.	048.0.	001.2		**prorsa**	Papilio prorsa Linné, 1758	Syst. Nat. (ed. X), p. 480, no. 134.	"Germany"
089.	049.0.		**Aglais**	Dalman, 1816	Papilio urticae Linné, 1758 Syst. nat. (ed. x), 1: 477. By original designation.	K. svenska VetenskAkad. Handl., 1816 (1): 56.	(gender: feminine)
089.	049.0.	001.0	**ichnusa**	(Hübner, [1824])	[Papilio] ichnusa	Samml. europ. Schmett., Pl. Pap. 170, Figs 840 (wrongly numbered 842 at the foot of the plate).	"Europa" (Sardinia by implication) [Italy: Sardinia: mountaintops of Monte Gennargentu LTR Balletto & Passerin d'Entrèves, 1986 Boll. Mus. regionale Sci. nat. Torino, 4 (1): 139]
089.	049.0.	001.1		ichnusa	Vanessa ichnusa Bonelli, 1825. Primary homonym of Papilio ichnusa Hübner, [1824]	In Desmarest, Bull. Sci. nat. Géol., (2) 4: 249.	[Italy:] Sardinia
089.	049.0.	002.0	**urticae**	(Linné, 1758)	Papilio urticae	Syst. nat. (ed. x), 1: 477, no. 114.	Not stated [Sweden: LTR Verity 1950 Farfalle diurne d'Italia, 4: 363]
089.	050.0.		**Polygonia**	Hübner, [1819]	Papilio c-aureum Linné, 1758 Syst. nat. (ed. x), 1: 477, no. 116. By selection by Scudder, 1872 4th ann. Rep. Peabody Acad. Sci., 1871: 30	Verz. bekannt. Schmett., (3): 36.	(gender: feminine)
089.	050.0.	001.0	**c-album**	(Linné, 1758)	Papilio c-album	Syst. nat. (ed. x), 1: 477, no. 115.	Not stated [Sweden: LTR Verity 1950 Farfalle diurne d'Italia, 4: 344]
089.	050.0.	002.0	**egea**	(Cramer, [1775])	[Papilio] egea	Uitland. Kapellen, 1: 124, Pl. 78.	[Turkey:] Istambul, Izmir

089.	051.0.		**Argynnis**	Fabricius, 1807	Papilio paphia Linné, 1758 (Syst. Nat. (ed. x), 1: 481), by selection by Latreille 1810 (Consid. Gén. Anim. Crust. Arach. Ins., p. 440, 353). The ICZN ruled under the plenary power that Argynnis Fabricius, 1807 is to be given precedence over Argyreus Scopoli, 1777 whenever the two names are considered synonyms (Op. 161 and Dir. 2, 4 ICZN)	Mag. f. Insektenk. (Illiger), 6: 283, no. 19.	(gender: feminine)
089.	051.1.			**Fabriciana** Reuss, 1920	Papilio niobe Linné, 1758 Syst. nat. (ed. x), 1: 481. By original designation.	Ent. Mitt., 9: 92 (foot note).	(gender: feminine)
089.	051.2.			**Mesoacidalia** Reuss, 1926	Papilio aglaja Linné, 1758 Syst. nat. (ed. x), 1: 481. By original designation.	Dt. Ent. Z. Iris, 1926 (1): 69.	(gender: feminine)
089.	051.3.			**Pandoriana** Warren, 1942	Papilio maja Cramer, [1775] Uitl. Kapell., 1 (1): 39, Pl. 25, Figs B, C. By original designation (Dir. 96 ICZN).	Entomologist, 75: 245 246.	(gender: feminine)
089.	051.4.			**Speyeria** Scudder, 1872	Papilio idalia Drury, [1773], Ill. Nat. Hist. 1: 25, pl. 13, figs. 1 3 (1770); 2: index (1773), by original designation	4th annl Rept. Peabody Acad. Sci. (1871): 44.	(gender: feminine)
089.	051.5.			Dryas Hübner, [1806] Invalid name, as included in a work rejected for nomenclatorial purposes. (Op. 97 ICZN)	Papilio paphia Linné, 1758 (Syst. Nat. (ed. x), 1: 481). By original designation.	Tentamen determinationis digestionis atque denominationis…Lepidoperum…, p. [1].	(gender: feminine)
089.	051.0.	001.0	**adippe**	([Denis & Schiffermüller], 1775)	P.[apilio] adippe L [ex errore] as conserved as a binomen under the plenary power and as interpreted by the neotype designated under the plenary power, namely the specimen figured by Hemming, Riley, Verity, 1958, (Ops. Decls. int. Comm. zool. Nomencl., 18: 55 64, pls. 1 3).	Ankündung syst. Werkes Schmett. wiener Geg., p. 177, no. 3.	[Austria:] Wien. Mödling (Op. 501 ICZN)
089.	051.0.	002.0	**aglaja**	(Linné, 1758)	Papilio aglaja	Syst. nat. (ed. x), 1: 481, no. 140 (Op. 974 ICZN).	Not stated [Sweden: LTR Verity 1950 Farfalle diurne d'Italia, 4: 298]
089.	051.0.	002.0		**charlotta**	Papilio charlotta Haworth, 1803	Lepidoptera britannica, 1: 32, no. 37.	[England:] "in comitatu Bedfordiense" [Bedbordshire].
				charlotta	[Haworth], 1802 Prodromus Lep. Brit., p. 3, no. 27 and foot note). A nomen Nudum.		"Britain" (by implication)
089.	051.0.	003.0	**elisa**	(Godart, 1823)	Papilio elisa	Tableau méthodique des Lépidoptères ou Papillons de France, p. 64, no. 86, 87.	France: Corse
089.	051.0.	003.1		cyrene	[Papilio] cyrene Hübner, [1824]	Samml. europ. Schmett., Pl. Pap. 166,	"Europa" (Italy: Sardinia., both by

					Primary homonym of Papilio cyrene Linné, 1758 Syst. Nat. (ed. x): 474, no. 100 (currently Salamis cyrene)	Figs 822-825.	implication)
089.	051.0.	003.2		cyrene	Papilio Argynnis cyrene Bonelli, 1826 Primary homonym of Papilio cyrene Linné, 1758 Syst. Nat. (ed. x): 474, no. 100 and of Papilio cyrene Hübner, [1824]	Mem. R. Accad. Sci. Torino, 30 (1): 175, no. 2. Pl. 1, Fig. 1, [1a].	[Italy:] Sardinia: Monte Gennargentu, 1000-1800 m.
089.	051.0.	004.0	**niobe**	(Linné, 1758)	Papilio niobe	Syst. nat. (ed. x), 1: 481, no. 143 (Op. 501 ICZN).	"Europa" [Sweden: LTR Verity 1950 Farfalle diurne d'Italia, 4: 282]
089.	051.0.	005.0	**pandora**	([Denis & Schiffermüller], 1775)	P.[apilio] pandora (Op. 516 ICZN)	Ankündung syst. Werkes Schmett. wiener Geg., p. 176, no. 1 (Dir. 96 ICZN).	[Austria:] Wien, by implication (wiener Gegend)
089.	051.0.	005.0		**maja**	Papilio maja Cramer, [1775] (Op. 516; Dir 96 ICZN)	Uitl. Kapell., 1 (1): 39, Pl. 25, Figs B, C.	[Turkey:] Costantinopolis [= Istambul] "reportedly, it was seen also by Vienna"
089.	051.0.	006.0	**paphia**	(Linné, 1758)	Papilio paphia	Syst. nat. (ed. x), 1: 481, no. 138 (Dir. 2; Op. 161 ICZN).	Not stated [Sweden: LTR Verity 1950 Farfalle diurne d'Italia, 4: 306]
089.	052.0.		**Issoria**	Hübner, [1819]	Papilio lathonia Linné, 1758 Syst. nat. (ed. x), 1: 481. By selection by Scudder, 1875 Proc. Amer. Acad. Arts Sci., Boston, 10: 198.	Verz. bekannt. Schmett., (2): 31.	(gender: feminine)
089.	052.0.	001.0	**lathonia**	(Linné, 1758)	Papilio lathonia	Syst. nat. (ed. x), 1: 481, no. 141.	"Europa" [Sweden: LTR Verity 1950 Farfalle diurne d'Italia, 4: 269]
089.	053.0.		**Brenthis**	Hübner, [1819]	Papilio hecate [Denis & Schiffermüller], 1775 Ankündung syst. Werkes Schmett. wiener Geg., p. 179. By selection by Scudder, 1872 4th Ann. Rep. Peabody Acad. Sci., 1871: 48.	Verz. bekannt. Schmett., (2): 30.	(gender: feminine)
089.	053.0.	001.0	**daphne**	(Bergsträsser, 1780)	[Papilio] daphne	Nomenclatur und Beschreibung der Insekten der Grafschaft Hanau Münzenberg, 5: 32. Pl. 79, Figs 3 7.	[Germany:] Saxony and upper Alsace
089.	053.0.	001.1		daphne	P.[apilio] daphne ([Denis & Schiffermüller], 1775) Nomen Nudum (see Kudrna & Belicek, 2005 Oedippus, 23: 25)	Ankündung syst. Werkes Schmett. wiener Geg., p. 177, no. 10.	[Austria:] Wien. By implication (wiener Gegend)
089.	053.0.	002.0	**hecate**	([Denis & Schiffermüller], 1775)	P.[apilio] hecate	Ankündung syst. Werkes Schmett. wiener Geg., p. 179, no. 4.	[Austria:] Wien. By implication (wiener Gegend)
089.	053.0.	003.0	**ino**	(Rottemburg, 1775)	Pap.[ilio] ino	Der Naturforscher, Halle, 6: 19, no. 5, Pl. 1, figs. 3, 4.	[Germany: Sachsen:] Halle and [Poland:] Landsberg an der Warthe" (= Gorzów Wielkopolski)
089.	054.0.		**Boloria**	Moore, [1900]	Papilio pales ([Denis & Schiffermüller], 1775) Ankündung syst. Werkes Schmett. wiener Geg., p. 177. By original designation.	Lep. ind., 4 (48): 243.	(gender: feminine)

089.	054.1.			**Clossiana** Reuss,1920	Papiilio selene ([Denis & Schiffermüller], 1775) Ankündung syst. Werkes Schmett. wiener Geg., p. 321. By original designation.	Ent. Mitt., 9: 192 (foot note).	(gender: feminine)
089.	054.2.			**Proclossiana** Reuss, 1926	Papilio aphirape Hübner, [1800] Samml. europ. Schmett., Pl: Pap. 5, Figs 23-25. (currently Boloria eunomia). By original designation.	Dt. ent. Z Iris, 1926 (1): 69.	(gender: feminine)
089.	054.0.	001.0	**dia**	(Linné, 1767)	Papilio dia	Syst. nat. (ed.xii), 1 (2): 785, no. 207.	"Austria"
089.	054.0.	002.0	**eunomia**	(Esper, [1800])	P.[apilio] eunomia	Die Schmetterlinge in Abbildungen nach der Natur..., Suppl. Theil 1, p. 94, Pl. 110, Fig. 5.	[Germany, Essen] Preussen: Königsberg
089.	054.0.	002.1		**aphirape**	[Papilio] aphirape Hübner, [1800]	Samml. europ. Schmett., Pl. Pap. 5, Figs 23-25; text [1805] 1: 8, no. 12.	"Schwaben“ [Swabia].
089.	054.0.	003.0	**euphrosyne**	(Linné, 1758)	Papilio euphrosyne	Syst. nat. (ed. x), 1: 481, no. 142.	"Europa and America" [Sweden: LTR Verity 1950 Farfalle diurne d’Italia, 4: 236]
089.	054.0.	004.0	**graeca**	(Staudinger, 1870)	Argynnis pales v. graeca	Horae Soc. ent. Ross., (1870) 7: 61, no. 78.	[NW] Grecia: Monti Veluchi: Karpinisi, Seltza
089.	054.0.	005.0	**napaea**	(Hoffmansegg, 1804)	Papilio napaea (Replacement name for P.[apilio] isis Hübner, [1800] Samml. europ. Schmett., Pl: Pap. 7, Figs 38-39; [1804] Pl. 110, Figs 563, 564; text [1806] 1: 9, no. 6. Primary homonym of [Papilio] isis Drury, [1773] Ill. nat. Hist., 2: [91] (index), Pl. 3, Figs 4, 5 text p. 4 [Sierra Leone] (currently Azanus isis)(see also Op. 474 ICZN)	Mag. f. Insektenk. (Illiger), 3: 196.	[Austria:] “die Alpen des Tyrols” (by replacement [Art. 72.7; 76.1 ICZN]).
089.	054.0.	006.0	**pales**	([Denis & Schiffermüller], 1775)	P.[apilio] pales	Ankündung syst. Werkes Schmett. wiener Geg., p. 177, no. 8.	Austria: Niederösterreich: Schneeberg: Ochsenboden, 1900 m (Neotype: Kudrna & Belicek, 2005 Oedippus, 23: 25).
089.	054.0.	006.1		**palustris**	Argynnis pales palustris Fruhstorfer, 1909	Int. Ent Z. Guben, 3: 112.	Switzerland: Simplon mountaintop; Zermatt; Arolla; Champéry; Engadine; [Italy: Val d'Aosta:] Val di Cogne; Piemonte.
089.	054.0.	007.0	**selene**	([Denis & Schiffermüller], 1775)	P.[apilio] selene	Ankündung syst. Werkes Schmett. wiener Geg., p. 321, no. 11.	[Austria:] Wien. By implication (wiener Gegend)
089.	054.0.	008.0	**thore**	(Hübner, [1804])	[Papilio] thore	Samml. europ. Schmett., Pl. Pap. 111, Figs 571, 573; text [1806] 1: 10, no. 20.	[Austria:] “Die Tyroler Alpen”
089.	054.0.	009.0	**titania**	(Esper, [1789])	P.[apilio] titania	Die Schmetterlinge in Abbildungen nach der Natur..., Suppl. Theil 1, p. 58; [1794], Pl. 103, Fig. 4.	[Italy, Kingdom of] Sardinia [: Piemonte] (LTR Verity 1950 Farfalle diurne d’Italia, 4: 249)
089.	054.0.	009.0		amathusia	[Papiliio[N.[ymphalis] amathusia	Die Schmetterlinge in Abbildungen	Russia: Petersburg, Moscow and the

					Esper, [1783]. Primary homonym of Papilio amathusia Cramer, 1777 Uitl. Kapell., 2 (15): 124. LT "Suriname"	nach der Natur..., 1 (2) Der europ. Schmett., Forts. Tagschmett., p. 170, Pl. 88, Figs. 1, 2.	Volga area
089.	055.0.		**Melitaea**	Fabricius, 1807	Papilio cinxia Linné, 1758 Syst. nat. (ed. x), 1: 480, By selection by Westwood, 1840 Introd. Class. Ins., 2, Generic Synopsis, p. 88 (Dir. 4 ICZN)	Mag. f. Insektenk. (Illiger), 6: 284, no. 29.	(gender: feminine)
089.	055.1.			Athaliaeformia Verity, 1950. An objective synonym of Mellicta Billberg, 1820	Papilio athalia Rottemburg, 1775 Der Naturforscher, Halle, 6: 5, no. 19 (2). By original designation (as implicit in the name).	Farfalle diurne d'Italia, 4: 89, 90, 157.	(gender: feminine)
089.	055.2.			**Mellicta** Billberg, 1820	Papilio athalia Rottemburg, 1775 Der Naturforscher, Halle, 6: 5, no. 19 (2). By selection by Moore, [1901] Lep. ind., 5 (49): 2.	Enum. Insect. Mus. Billberg, p. 77.	(gender: feminine)
089.	055.3.			**Cinclidia** Hübner, [1819]	Papilio phoebe [Denis & Schiffermüller], 1775 Ankündung syst. Werkes Schmett. wiener Geg., p. 179. By selection by Scudder, 1875 Bull. Buffalo Soc. nat. Sci., 2: 266.	Verz. bekannt. Schmett., (2): 29.	(gender: feminine)
089.	055.4.			**Didymaeformia** Verity, 1950	Papilio didyma Esper, [1778] Die Schmetterlinge in Abbildungen nach der Natur..., 1 [1] Die Tagschmetterlinge, .Pl. 41, Fig. 3.	Farfalle diurne d'Italia, 4: 89, 90.	(gender: feminine)
089.	055.0.	001.0	**aetherie**	(Hübner, [1826])	[Papilio] aetherie	Samml. europ. Schmett., Pl. Pap. 177, Figs 875-878.	"Europa" (by implication) [Spain and Portugal LTR Higgins, 1941 Trans R. ent. Soc. Lond., p. 346]
089.	055.0.	002.0	**asteria**	Freyer, 1828	Papilio Melitaea asteria	Beitr. z. Gesch. europ. Schmett., 1 (6): 115, no. 47; Pl. 36, Fig. 1.	[Germany: Bayern:] Erlangen (by replacement (Art. 72.7; 76.1 ICZN))
089.	055.0.	003.0	**athalia**	(Rottemburg, 1775)	Pap.[ilio] athalia	Der Naturforscher, Halle, 6: 5, no. 19 (2).	[France:] Paris
089.	055.0.	003.a	**nevadensis**	Oberthür, 1904	Melitaea dejone [sic!] nevadensis	Études de Lépidoptèrologie Comparée, 1: 14.	[Spain: Andalusia:] "Sierra Nevada, côté de Lanjaron".
089.	055.0.	003.1		**celadussa**	Melitaea athalia ssp. celadussa Fruhstorfer, 1910	Soc. ent., 25(13): 51.	[France / Italy]: Maritime Alps: Col di Tenda/Col de Tende
089.	055.0.	003.2		helvetica	Melitaea athalia var. helvetica Rühl, 1888. A name created for a supposed hybrid.	Soc. ent., 3(18): 137.	[Switzerland: Graubünden:] Rhetian Alps: Stalla, Bergun
089.	055.0.	004.0	**aurelia**	Nickerl, 1850	Melitaea aurelia Replacement name for [Papilio] parthenie Borkhausen, 1788, primary homonym of Papilio parthenie Bergsträsser, 1780 Nomenclatur und Beschreibung er Insekten der Grafschaft Hanau Münzenberg, 4: 34; Pl. 87, Figs 5, 6 (currently Brenthis ino)	Synopsis der Lepidopteren Fauna Böhmens, p. 12, no. 7.	[Germany: Bayern:] Erlangen (by replacement (Art. 72.7; 76.1 ICZN))

089.	055.0.	004.1		parthenie	[Papilio] parthenie Borkhausen, 1788. Primary homonym of Papilio parthenie Bergsträsser, 1780 Nomenclatur und Beschreibung der Insekten der Grafschaft Hanau Münzenberg, 4: 34; Pl. 87, Figs 5, 6 (currently Brenthis ino)	Naturgeschichte der europäischen Schmetterlinge, 1: 53.	[Germany: Bayern:] Erlangen
089.	055.0.	005.0	**britomartis**	Assmann, 1847	Melitaea britomartis	Zeit. f ent., Breslau Lep., 1 (1): 2.	[Poland:] Schlesien [= Śląsk:] Breslau [=Wroclaw]
089.	055.0.	005.1		**aureliaeformis**	Melitaea athalia aureliaeformis Verity, 1917	Boll. Soc. ent. ital., 48: 186 (foot note).	[Italy: Piemonte:] "surroundings of Torino" [Parco di Venaria LTR Verity, 1950 Farfalle diurne d'Italia, 5: 184]
089.	055.0.	005.2		**melathalia**	Melitaea athalia f. melathalia Rocci, 1930	Boll. Soc. ent. ital., 62 (10): 184.	[Italy:] Lombardia/Piemonte: Abbiategrasso / Vigevano: Santa Maria del Bosco (p. 183)
089.	055.0.	006.0	**cinxia**	(Linné, 1758)	P.[apilio] cinxia	Syst. nat. (ed. x), 1: 480, no. 137.	Not stated (Scandinavia: Verity, 1913. Boll. Soc. ent. Ital., 44: 204); Sweden: gardens of the Uppsala University (LTR Verity 1950 Farfalle diurne d'Italia, 4: 130)
089.	055.0.	007.0	**deione**	(Geyer, [1832])	[Papilio] deione	Samml. europ. Schmett., Pl. Pap. 192, Figs 947-950.	Schweiz: Alps. [= Alps of Switzerland] (see Hemming, 1937, Hübner. A bibliographical and systematic account…, 1: 219).
089.	055.0.	008.0	**diamina**	(Lang, 1789)	Papilio diamina	Verz. Schmett. Gegend um Augsburg gesammelt, (ed. 2), p. 44, no. 353-356.	[Germany:] Augsburg
089.	055.0.	008.1		dictynna	P. [apilio] dictynna Esper, [1778] Primary homonym of Papilio dictynna [Denis & Schiffermüller], 1775 Ankündung syst. Werkes Schmett. wiener Geg., p. 179, no. 5 (Currently Brenthis ino)	Die Schmetterlinge in Abbildungen nach der Natur..., 1 [1] Die Tagschmetterlinge, Pl. 48, Figs 2a; 2b, text [1779]: 382.	[Germany: Bayern:] Erlangen
089.	055.0.	009.0	**didyma**	(Esper, [1778])	P.[apilio] didyma	Die Schmetterlinge in Abbildungen nach der Natur..., 1 [1] Die Tagschmetterlinge, Pl. 41, Fig. 3, text [1779] p.: 365.	[Germany, Mittelfranken:] Uffenheim
089.	055.0.	010.0	**trivia**	([Denis & Schiffermüller], 1775)	P.[apilio] trivia	Ankündung syst. Werkes Schmett. wiener Geg., p. 179, no. 8.	[Austria:] Wien. By implication (wiener Gegend)
089.	055.0.	010.1		**fascelis**	P.[apilo] fascelis (Esper, [1783])	Die Schmetterlinge in Abbildungen nach der Natur..., 1 (2) Der europ. Schmett., Forts. Tagschmett., p. 171, Pl. 88, Figs 3, 4.	[Russia:] "Volga area: Sarepta" [Volgograd]
089.	055.0.	011.0	**parthenoides**	Keferstein, 1851	Melitaea athalia var. parthenoides. Replacement name for Argynnis parthenie Godart, 1822 Hist. Nat. des	Ent. Ztg, Stettin, 12: 244, no. 11c.	[France:] Le Hâvre, Chartres, Auxerre (by replacement (Art. 72.7; 76.1 ICZN))

					Lépid. ou Papillons Fr., 2: 75, no. 25, Pl. 9, Figs 7, 8". LT: Le Havre, Chartes and Hauxerre nec O.[chsenheimer] as figured by Herbst, 1800 Natursystem aller bekannten Inisekten, Schmetterlinge, 10: 238, no. 67. Pl. 283, Figs 1 4 (=[Papilio] parthenie Borkhausen, 1788).		
089.	055.0.	004.1		parthenie	Argynnis parthenie Godart, 1819	In Latreille Encyclopédie méthodique, Histoire naturelle, 9 (Lépid) [1]: 284, no. 52.	[France:] Yonne: Toucy, Vermanton
089.	055.0.	012.0	**phoebe**	(Goeze, 1779)	Papilio phoebe	Entomologische Beyträge...Linné, 3 (1): 365, no. 13.	[Austria:] Wien. By implication (the only cited reference is Schiffermüller's)
089.	055.0.	012.1		phoebe	P.[apilio] phoebe ([Denis & Schiffermüller], 1775) Nomen Nudum (see Kudrna & Belicek, 2005 Oedippus, 23: 25)	Ankündung syst. Werkes Schmett. wiener Geg., p. 179, no. 1.	[Austria:] Wien. By implication (wiener Gegend).
089.	055.0.	013.0	**varia**	Meyer Dür, [1851]	Melitaea parthenie var. varia	Neue Denkschriften der Allgemeinen Schweizerischen Gesellschaft für die Gesammten Naturwissenschaften, 12: 133, no. 89, Pl. 1, Figs 5, 6.	[Switzerland:] Alps of Graubünden
089.	055.0.	014.0	**ornata**	Cristoph, 1893	Melitaea phoebe var. ornata Christoph, 1893	Dt. Ent. Zeit. Iris, 6 (1): 87.	Habitat circa Guberli [=Russia, Orenburg, Guberlya], promontorium uralensium australium.
089.	055.0.	014.1		**emipunica**	Melitaea phoebe emipunica Verity, 1919	Entomologist's Rec. J. Var., 31 (1919): 184.	[Italy) Sicily: Palermo: San Martino [alle Scale], 800 m
089.	055.0.	014.2		**ogygia**	Melitaea phoebe ogygia Fruhstorfer, 1908	Int. ent. Z. Guben, 1 (41): 310.	Greece: [Peloponnesus:] Poros
089.	055.0.	014.3		**telona**	Melitaea phoebe telona Fruhstorfer, 1908	Int. ent. Z. Guben, 1 (41): 310.	"Palestina: Jerusalem"
089.	055.0.	014.4		totila	Melitaea phoebe ab. totila Stauder, 1914	Z. wiss. Insekt. Biol., 10: 373.	Italy, Calabria, Monte Cocuzzo, 1300 m
089.	056.0.		**Euphydryas**	Scudder, 1872	Papilio phaeton Drury, [1773] Ill. nat. Hist., 1: (index) and p. 42, Pl. 21, Figs 3, 4) (Op. 278, 474 ICZN)	4th Ann. Rep. Peabody Acad. Sci., 1871: 48.	(gender: feminine)
089.	056.1.			**Eurodryas** Higgins, 1978	Papilio aurinia Rottemburg, 1775 Der Naturforscher, Halle, 6: 5. By original designation.	Ent. Gaz., 29 (3): 114.	(gender: feminine)
089.	056.2.			**Hypodryas** Higgins, 1978	Papilio maturna Linné, 1758 Syst. nat. (ed. x), 1: 480. By original designation.	Ent. Gaz., 29 (3): 114.	(gender: feminine)
089.	056.0.	001.0	**aurinia**	(Rottemburg, 1775)	Pap.[ilio] aurinia (Op. 516 ICZN)	Der Naturforscher, Halle, 6: 5, no. 19 (3).	[France:] Paris
089.	056.0.	001.1		artemis	Papilio artemis [Denis & Schiffermüller], 1775 (Op. 516 ICZN)	Ankündung syst. Werkes Schmett. wiener Geg., p. 322, no. 10.	[Germany:] Frankfurt

089.	056.0.	002.0	**cynthia**	([Denis & Schiffermüller], 1775)	P.[apilio] cynthia	Ankündung syst. Werkes Schmett. wiener Geg., p. 179, no. 3-	[Austria:] Nieder Österreich: Schlangenweg (Neotype: Kudrna & Belicek, 2005 Oedippus, 23: 22).
089.	056.0.	002.1		**ichnea**	Melitaea ichnea Boisduval, 1833	Icones Historiques des Lépidoptères d'Europe, 1: 112, Pl. 23, Figs 5, 6.	"Lapland and N Siberia" ex errore [recte Austria]
089.	056.0.	003.0	**glaciegenita**	(Verity, 1928)	Melitaea aurinia ex. glaciegenita Replacement name for Papilio merope Prunner, 1798 primary homonym of Papilio merope Fabricius, 1775	Entomologist's Rec. J. Var., 40: 43.	[Italy: Piemonte: Cuneo:] Val Varaita: Lyaiol [Val Varaita: Pian del Ciaiol, =Ceiol] (by replacement (Art. 72.7; 76.1 ICZN))
089.	056.0.	003.1		merope	Pap.[ilio] merope de Prunner, 1798. Primary homonym of Papilio merope Fabricius, 1775 Syst. ent., p 495, no. 228 "habitat in Nova Hollandia"	Lepid. Pedem., p. 73, no. 151.	[Italy: Piemonte] "in Valle Varaitana circa Lyaiol" [Val Varaita: Pian del Ciaiol=Ceiol]
089.	056.0.	004.0	**provincialis**	(Boisduval, [1828])	Melitaea arthemis var. provincialis	Europaeorum lepidopterorum index methodicus, 1: 17.	"Galloprov." [= France: Provence]
089.	056.0.	005.0	**intermedia**	(Ménétriés, 1859)	Melitaea maturna var. intermedia	Schrenk's Reisen und Forschungen im Amur Lande, 2 (Lepidopt.)(1): 22, Pl. 2, Fig. 2.	[Russia:] Amur: Khotum
089.	056.0.	005.1		**wolfensbergeri**	Melitaea maturna var. wolfensbergeri Frey, 1880	Die Lepidopteren der Schweitz, p. 27.	[Switzerland: Graubünden:] southern slopes of the Maloja at ab. 4600 ft [1400 m]; Pontresina: Val Rosegg 2200 m; Sils Maria; Languard
089.	056.0.	006.0	**maturna**	(Linné, 1758)	Papilio maturna	Syst. nat. (ed. x), 1: 480, no. 136.	Not stated (in Fauna Suecica, 1761, p. 280, no. 1062: "habitat apud nos" [=Sweden: Uppsala])
089.	057.0.		**Charaxes**	Ochsenheimer, 1816	Papilio jasius Linné, 1758 (Syst. Nat. (ed. x), 1 (2): 749 (errata)), by monotypy (Op. 577 ICZN)	Schmetterlinge Europa, 4: 18.	(gender: masculine)
089.	057.0.	001.0	**jasius**	(Linné, 1767)	Papilio jasius	Syst. nat. (ed.xii), 1 (2): 749, no. 26 as Papilio jason; see: ERRATA p. [1364] "p. 749 no. 26 lege jasius" (Op. 577 ICZN)(see Art 32.5.1.1. ICZN)	"Barbaria" (Algeria: Algeri LTR Verity 1950 Farfalle diurne d'Italia, 4: 15)
089.	057.0.	001.1		jason	Papilio jason Linné, 1767.Primary homonym of Papilio jason Linné, 1758 Syst. Nat. (ed. X), p. 148, no. 171	Syst. nat. (ed.xii), 1 (2): 749, no. 26.	"Barbaria" (Algeria: Algeri LTR Verity 1950 Farfalle diurne d'Italia, 4: 15)
089.	058.0.		**Apatura**	Fabricius, 1807	Papilio iris Linné, 1758 (Syst. Nat., (ed. x), 1: 476), by selection by Curtis, 1831 British Entomology, 5: Pl. 338, as interpreted by the lectotype designated under the plenary power, namely the specimen figured by South, 1906 (The Butterflies of the British Isles, pl. 29, fig. 1; LT: "England" Op. 232, 264, Dir. 4 ICZN)	Mag. f. Insektenk. (Illiger), 6: 280, no. 9.	(gender: feminine)
089.	058.0.	001.0	**ilia**	([Denis &	P.[apilio] ilia	Ankündung syst. Werkes Schmett.	[Austria:] Wien. By implication

				Schiffermüller], 1775)		wiener Geg., p. 172 no. G.2 (Op. 264 ICZN).	(wiener Gegend)
089.	058.0.	002.0	**iris**	(Linné, 1758)	Papilio iris as interpreted by the lectotype designated under the plenary power, namely the specimen figured by South, 1906 (The Butterflies of the British Isles, Pl. 9, Fig. 1).	Syst. nat. (ed. x), 1: 476, no. 110,	"Germany, Anglia" ["England" (Op. 232, 264 ICZN)]\
089.	059.0.		**Limenitis**	Fabricius, 1807	Papilio populi Linné, 1758 (Syst. Nat. (ed. x), 1: 476), by selection by Dalman, 1816 (K. Svensk. Vetensk. Akad. Handl., Stockholm, 1816 (1): 55) (Op. 278; Dir. 4 ICZN)	Mag. f. Insektenk. (Illiger), 6: 281, no. 10.	(gender: feminine)
089.	059.1.			**Ladoga** Moore, [1898]	Papilio camilla Linné, 1764 Museum…Ludovicae Ulricae..., p. 304. By original designation.	Lep. ind., 3 (32): 146; (33): 174.	(gender: feminine)
089.	059.2.			**Litinga** Moore, [1898]	Limenitis cottini Oberthür, 1884 Études ent., 9: 17, Pl. 2, Fig. 5. By original designation	Lep. ind., 3 (32): 146; (33): 173	(gender: feminine)
089.	059.0.	001.0	**camilla**	(Linné, 1764)	Papilio camilla	Museum…Ludovicae Ulricae..., p. 304, no. 122 (Op. 562, 1917 ICZN).	"Germany"
089.	059.0.	001.1		sibilla	Papilio sibilla Linné, 1767	Syst. Nat. (ed. XII), 1 (2): 781, no. 186.	"Germany"
089.	059.0.	001.2		prorsa	Papilio prorsa Linné, 1764 Primary homonym of Papilio prorsa Linné, 1758 Syst. Nat. (ed. X), p. 480, no. 134 (currently Araschnia levana)	Museum…Ludovicae Ulricae..., p. 303, no. 121 (Op. 562, 1917 ICZN).	"Germany"
089.	059.0.	002.0	**populi**	(Linné, 1758)	Papilio populi	Syst. nat. (ed. x), 1: 476, no. 111 (Op. 278 ICZN).	Not stated (LTR: Sweden: Verity 1950 Farfalle diurne d'Italia, 4: 55)
089.	059.0.	003.0	**reducta**	Staudinger, 1901	Limenitis camilla var. reducta	In: Staudinger & Rebel, Cat. Lepid. pal. Faunengeb., 1: 22, no. 135a (Op. 562 ICZN).	Arm.[enia] or.[ientalis], Hyrc.[ania]
089.	059.0.	003.1		anonyma	Limenitis anonyma Lewis, 1872. Replacement name for Papilio camilla [Denis & Schiffermüller], 1775 Ankündung syst. Werkes Schmett. wiener Geg., p. 172, no. 3; by misidentification of Papilio camilla Linné, 1764 suppressed under the plenary power for the purposes of the Principle of Priority but not for those of the Principle of Homonymy (Op. 562 ICZN)	Zoologist: a monthly journal of natural history, (2) (7): 3074, discussion, p. 33.	[Austria:] Wien (by replacement (Art. 72.7; 76.1 ICZN)).
089.	060.0.		**Neptis**	Fabricius, 1807	Papilio aceris Esper, [1783] Die Schmetterlinge in Abbildungen nach	Mag. f. Insektenk. (Illiger), 6: 282, no. 15.	(gender: feminine)

					der Natur..., 1 (2) Der europ. Schmett., Forts. Tagschmett., p. 142, Pl. 81, Figs 3 ♂, 4 ♀, nec Pl. 72, Fig 1), by selection by Crotch, 1872 (Cistula entomol., 1: 66) (Op. 232; Dir. 4 ICZN).		
089.	060.0.	001.0	**rivularis**	(Scopoli, 1763)	Papilio rivularis	Entomol. Carn., p. 165, no. 443, as interpreted by the lectotype designated by Hemming, 1959 (Ops & Decls int. Comm. zool. Nomencl., 20: 326) (Op. 562 ICZN).	"Carniola" [=Slovenia: (Kranjska] (by implication)
089.	060.0.	001.1		lucilla	Papilio lucilla [Denis & Schiffermüller], 1775	Ankündung syst. Werkes Schmett. wiener Geg., p. 173, no. 4.	[Austria:] Wien. By implication (wiener Gegend)
089.	060.0.	002.0	**sappho**	(Pallas, 1771)	Papilio sappho	Reise durch verschiedene Provinzen des russischen Reichs, 1: 471, no. 62 (see also Op. 2152 ICZN).	"Russia" [Volga area]
089.	060.0.	002.1		aceris	Papilio aceris Esper, [1783]	Die Schmetterlinge in Abbildungen nach der Natur..., 1 (2) Der europ. Schmett., Forts. Tagschmett., p. 142, Pl. 81, Figs Figs 3 ♂, 4 ♀; Pl. 82, Fig. 1, nec Pl. 72, Fig 1 as stated in text.	Austria: Pressburg, Hainburg
089.	061.0.		**Libythea**	Fabricius, 1807	Papilio celtis Laicharting, [1782] In Fuessly, 1782 Archiv der Insektenges., 1 (2) (2): 1, Pl. 2, Figs 1 3. By selection by Latreille, 1910 Consid. Gen. Anim. Crust. Arachn. Ins., p. 440 (Dir. 4 ICZN)	Mag. f. Insektenk. (Illiger), 6: 284, no. 28.	(gender: feminine)
089.	061.0.	001.0	**celtis**	(Laicharting, [1782])	Papilio celtis	In Fuessly, 1782 Archiv der Insektenges., 1 (2) (2): 1, Pl. [1], Figs 1-3.	[Italy: Bolzano:] Südtirol: Unterazwang [= Campodazzo]: fra Bolzano and Merano
089.	062.0.		**Satyrus**	Latreille, 1810	Papilio actaea Esper, [1780] Die Schmetterlinge in Abbildungen nach der Natur..., 1 (2) Der europ. Schmett., Forts. Tagschmett., p. 37, Pl. 57, Fig. 1a?, 1b?) by designation under the plenary power (Op. 142 ICZN); not Fig. 2 as stated in text.	Consid. gén. Anim. Crust. Arach. Ins., p. 335, 440.	(gender: masculine)
089.	062.0.	001.0	**actaea**	(Esper, [1780])	P.[apilio] actaea	Die Schmetterlinge in Abbildungen nach der Natur..., 1 (2) Der europ. Schmett., Forts. Tagschmett., p. 37, Pl. 57, Fig. 1a, 1b (Dir. 4 ICZN); nec Fig. 2 as stated in text.	S. France
089.	062.0.	002.0	**ferula**	(Fabricius, 1793)	Papilio ferula	Entomologia systematica, 3 (1): 225, no. 707.	Italy
089.	062.0.	002.1		proserpina	Papilio proserpina Cyrillo, 1787 Primary homonym of Papilio proserpina	Entomologia neapolitana specimen primum, p. [8], Pl. 2, Fig. 11.	“Habitat in montibus rarus” [Italy “Regno di Napoli” = Kingdom of

					[Denis & Schiffermüller], 1775 Ankündung syst. Werkes Schmett. wiener Geg., p. 169, no. 23: Pl. 1b, Fig. 9 (currently Kanetisa circe)		Naples]
089.	062.0.	002.2		**bryce**	[Papilio] bryce Hübner, [1800]	Samml. Europ. Schmett., Pl. 33, Figs 149, 150, [1813] Pl. 144, Figs 724-727, text [1806] p. 25, no. 17.	Russia
089.	062.0.	002.3		**cordula**	Papilio cordula Fabricius, 1793	Entomologia systematica, 3 (1): 226, no. 708.	Italy
089.	062.0.	002.4		**orsiera**	Pap.[ilio] orsiera de Prunner, 1798	Lepidoptera pedemontana, p. 73, no. 148.	[Italy: Piemonte: Pr. Torino: Monte Orsiera] (by implication) "Montibus"
089.	062.0.	002.5		**peas**	Pap.[ilio] peas de Prunner, 1798	Lepidoptera pedemontana, p. 70, no. 137.	[Italy: Piemonte] "in montibus rarus"
089.	063.0.		**Minois**	Hübner, [1819]	Papilio phaedra Linné, 1764 Museum…Ludovicae Ulricae..., p. 280. By selection by Butler, 1868 Entomologist's month. Mag., 4: 194.	Verz. bekannt. Schmett., (4): 57.	(gender: feminine)
089.	063.0.	001.0	**dryas**	(Scopoli, 1763)	Papilio dryas	Entomol. Carn., p. 153, no. 429.	"Carniola" [=Slovenia: (Kranjska] (by implication)
089.	063.0.	001.1		phaedra	Papilio phaedra Linné, 1764	Museum…Ludovicae Ulricae..., p. 280, no. 98.	"Germany"
089.	064.0.		**Kanetisa**	Moore, [1893]	Hipparchia digna Marshall., 1883 J. asiat. Soc. Bengal., (2) 51 (4): 67. By original designation.	Lep. ind., 2 (14): 42.	(gender: feminine)
089.	064.1.			**Brintesia** Fruhstorfer, 1911	Papilio proserpina [Denis & Schiffermüller], 1775 Ankündung syst. Werkes Schmett. wiener Geg., p. 169, no. 23: Pl. 1a Fig 9; Pl. 1b, Fig. 9a, 9b. By replacement (Art. 67.8 ICZN)	In: Seitz GrossSchmett. Erde, 9: 307, 308.	(gender: feminine)
089.	064.0.	001.0	**circe**	(Fabricius, 1775)	P.[apilio] circe	Systema Entomologiae, p 495, no. 226 (Dir. 96 ICZN).	Europa
089.	065.0.		**Arethusana**	de Lesse, 1951	Papilio arethusa [Denis & Schiffermüller], 1775 Ankündung syst. Werkes Schmett. wiener Geg., p. 169. By original designation	Revue fr. Lépid., 13 (3/4): 40.	(gender: feminine)
089.	065.0.	001.0	**arethusa**	([Denis & Schiffermüller], 1775)	P.[apilio] arethusa (Op. 516 ICZN)	Ankündung syst. Werkes Schmett. wiener Geg., p. 169, no. 16.	[Austria:] Wien. By implication (wiener Gegend)
089.	065.0.	001.1		**erythia**	[Papilio] erythia Hübner, [1805]	Samml. Europ. Schmett., Pl. Pap. 115, Figs 591, 592; text: [1806] 1: 26, no. 20.	"Russien"
089.	066.0.		**Hipparchia**	Fabricius, 1807	Papilio hermione Linné, 1764 Museum…Ludovicae Ulricae..., p. 281. By selection by Butler, 1868 Entomologist's month. Mag., 4: 194 (Dir. 4 ICZN)	Mag. f. Insektenk. (Illiger), 6: 281, no. 14.	(gender: feminine)

089.	066.1.			**Eumenis** Hübner, [1819]	Papilio autonoe Esper, [1784] Die Schmetterlinge in Abbildungen nach der Natur..., 1 (2) Der europ. Schmett., Forts. Tagschmett., p. 167, Pl. 86, Figs 1 3. By selection by Grote, 1873 Can. Ent., 5: 62	Verz. bekannt. Schmett., (4): 58.	(gender: feminine)
089.	066.2.			**Pseudotergumia** Agenjo, 1948	Papilio fidia Linné, 1767 Syst. nat. (ed. xii), 1 (2): 770. By original designation.	Graellsia, 5 (3): [unnumbered page].	(gender: feminine)
089.	066.3.			**Neohipparchia** de Lesse, 1951	Papilio statilinus Hufnagel, 1766 Berlinisches Mag., 2: 84. By original designation	Revue fr. Lépidopt., 13: 40.	(gender: feminine)
089.	066.4.			**Parahipparchia** Kudrna, 1977	Papilio semele Linné, 1758 Syst. nat. (ed. x), 1: 474. By original designation	A revision of the Genus Hipparchia Fabricius, p 12, 13.	(gender: feminine)
089.	066.0.	001.0	**aristaeus**	(Bonelli, 1826)	Papilio Satyrus aristaeus	Mem. R. Accad. Sci. Torino, 30 (1): 177, Pl. 2, Fig. 1, [1a], 2.	[Italy,] Sardinia: Monte Gennaregentu: 800 1000 m
089.	066.0.	001.1		**sardoa**	Satyrus semele v. sardoa Spuler, 1908.	Die Schmetterlinge Europas, 1: 43.	[Italy:] Sardinia
089.	066.0.	002.0	**neapolitana**	(Stauder, 1921)	Satyrus semele f. neapolitana	Dt. ent. Z. "Iris", 35: 29.	[Italy: Campania:] “nel Napoletano” [i.e. by Naples]
089.	066.0.	002.0		**ballettoi**	Hipparchia ballettoi Kudrna, 1984	Fragmenta ent., 17 (2): 239	Italy: [Campania:]: Monte Faito
089.	066.0.	003.0	**blachieri**	(Fruhstorfer, 1908)	Satyrus semele blachieri	Ent. Z. Stuttgart, 22 (23): 93.	[Italy:] Sicily
089.	066.0.	004.0	**fagi**	(Scopoli, 1763)	Papilio fagi	Entomol. Carn., p. 152, no. 428.	"Carniola" [=Slovenia: Kranjska] (by implication)
089.	066.0.	005.0	**fidia**	(Linné, 1767)	Papilio fidia	Syst. nat. (ed.xii), 1 (2): 770, no. 138.	"Barbaria" (=Algeria)
089.	066.0.	006.0	**hermione**	(Linné, 1764)	Papilio hermione	Museum…Ludovicae Ulricae..., p. 281, no. 99.	"Germany"
089.	066.0.	006.1		**alcyone**	P.[apilio] alcyone ([Denis & Schiffermüller], 1775)	Ankündung syst. Werkes Schmett. wiener Geg., p. 169, no. 21.	[Austria:] Wien. By implication (wiener Gegend)
089.	066.0.	006.2		aelia	Papilio aelia Hoffmansegg, 1804 Replacement name for Papilio alcyone [Denis & Schiffermüller], 1775 Ankündung syst. Werkes Schmett. wiener Geg., p. 169, no. 21, as figured by Hübner, [1800] Samml. europ. Schmett., Pl Pap. 27, Figs 125, 126. Primary homonym of Papilio alcyone Cramer, [1775] Uitl. Kap., 1: 89, Pl. 58, Figs A, B, C [now Catopsilia pyranthe]. Unnecessary Replacement since Schiffermüller’s names antedate Cramer’s (Op. 516).	Mag. f. Insektenk. (Illiger), 3: 184.	[Austria:] Wien [by replacement (Art. 72.7; 76.1 ICZN)].
089.	066.0.	006.3		**genava**	Eumenis fagi genava Fruhstorfer, 1907	Ent. Wbl., 24: 81.	Switzerland: Valais: Martigny
089.	066.0.	007.0	**leighebi**	Kudrna, 1976	Hipparchia semele leighebi	Atalanta, 7 (3): 168 169.	Italy:[Messina:] Isola di Vulcano, max 500 m.

089.	066.0.	008.0	**neomiris**	(Godart, 1822)	Satyre [sic!] neomiris	Hist. nat. des Lépidoptères ou Papillons de France, 2: 88 , Pl. 11, figs 1, 2.	[France:] southern part of Corsica
089.	066.0.	008.1		**marmorae**	[Papilio] marmorae Hübner, [1824]	Samml. europ. Schmett., Pl. Pap. 164, Figs 814- 817; no text.	[Europa] by implication [Sardinia]
089.	066.0.	008.2		**jolaus**	Papilio Satyrus jolaus Bonelli, 1826	Memorie Accad. Sci. Torino, 30 (1): 179, Pl. 3, Figs 1, 1a, 2.	[Italy:] Sardinia
089.	066.0.	009.0	**sbordonii**	Kudrna, 1984	Hipparchia sbordonii	Fragmenta ent., 17 (2): 239.	Italy: [Lazio:] Isola di Ponza: Monte Guardia
089.	066.0.	010.0	**semele**	(Linné, 1758)	Papilio semele	Syst. nat. (ed. x), 1: 474, no. 101.	Not stated (Sweden: LTR Verity 1953 Farfalle diurne d'Italia, 5: 304)
089.	066.0.	011.0	**statilinus**	(Hufnagel, 1766)	Papilio statilinus	Berlinisches Mag., 2: 84, no. 52.	[Germany: Berlin:] "hiesigen Gegend"
089.	066.0.	011.1		**allionia**	Papilio allionia Fabricius, 1781	Species insectorum, 2: 83, no. 366.	"in Lusitania D. Gray" [= Portugal]
089.	067.0.		**Chazara**	Moore, [1893]	Papilio briseis Linné, 1764 Museum…Ludovicae Ulricae..., p. 276. By original designation.	Lep. ind., 2 (13): 21.	(gender: feminine)
089.	067.0.	001.0	**briseis**	(Linné, 1764)	Papilio briseis	Museum…Ludovicae Ulricae..., p. 276, no. 94.	"Germany"
089.	068.0.		**Erebia**	Dalman, 1816	Papilio ligea Linné, 1758 (Syst. Nat. (ed. x), 1: 473), by original designation (Op. 506 ICZN)	K. Vetensk. Akad. Handl., Stockholm, (1): 58.	(gender: feminine)
089.	068.1.			**Marica** Hübner, [1819]	Papilio stygne Ochsenheimer, 1807 Schmett. Europa, 1 (1): 276 (currently Erebia meolans). By selection by Hemming, 1933 Entomologist, 66: 198	Verz. bekannt. Schmett., (4): 63.	(gender: feminine)
089.	068.2.			**Syngea** Hübner, [1819]	Papilio pronoe Esper, [1780] Die Schmetterlinge in Abbildungen nach der Natur..., 1 (2) Der europ. Schmett., Forts. Tagschmett., p. 23, Pl. 54, Fig. 1. By selection by Hemming, 1933 Entomologist, 66: 198.	Verz. bekannt. Schmett., (4): 62.	(gender: feminine)
089.	068.3.			**Phorcis** Hübner [1819]	Phorcis epistygne Hübner, [1819] Verz. bekannt. Schmett., (4): 62, no. 599. By selection by Hemming, 1933 Entomologist, 66: 198.	Verz. bekannt. Schmett., (4): 62.	(gender: feminine)
089.	068.4.			**Gorgo** Hübner, [1819]	Papilio ceto Hübner, [1804] Samml. Europ. Schmett., 1, Pl. Pap. 112, Figs 578, 579 (currently E. albergana). By selection by Hemming, 1933 Entomologist, 66: 198.	Verz. bekannt. Schmett., (4): 64.	(gender: feminine)
089.	068.5.			Oreina Westwood, 1841. Junior homonym of Oreina Chevrolet, 1935 In Dejean, Cat. Coléopt.,	Papilio cassiope Fabricius, 1787 Mantissa Ins., 2: 42. By designation by Butler, 1868 Entomologist's month. Mag., 4: 194.	In: Humphreys & Westwood Brit. Butt. Transformations, 1841 (ed. 1), p. 76.	(gender: feminine)

				(ed. 2) (5): 402) (Coleoptera: Chrysomelidae).			
089.	068.6.			**Medusia** Verity, 1953	Papilio medusa [Denis & Schiffermüller], 1775 Ankündung syst. Werkes Schmett. wiener Geg., p. 167. By original designation.	Farfalle diurne d'Italia, 5: 179.	(gender: feminine)
089.	068.7.			**Triariia** Verity, 1953	Papilio triarius de Prunner, 1798 Lepidoptera pedemontana, p. 70. By original designation.	Farfalle diurne d'Italia, 5: 186.	(gender: feminine)
089.	068.8.			**Truncaefalcia** Verity, 1953	Papilio aethiops Esper, [1776] Die Schmetterlinge in Abbildungen nach der Natur..., 1 [1] Die Tagschmetterlinge, Pl. 25, Fig. 3, text [1779] p. 312. By original designation.	Farfalle diurne d'Italia, 5: 188.	(gender: feminine)
089.	068.9.			**Simplicia** Verity, 1953. Replacement name for Oreina Westwood, 1841. Junior homonym of Oreina Chevrolat, 1935 In Dejean, Cat. Coléopt., (ed. 2) (5): 402) (Coleoptera: Chrysomelidae).	Papilio epiphron Knoch, 1783 Beitr. Insektengesch., 3: 131, Pl. 6, Fig. 7. By selection by Butler, 1868 Entomologist's month. Mag., 4: 194. By Replacement (Art. 67.8 ICZN) (Art. 67.8 ICZN).	Farfalle diurne d'Italia, 5: 194.	(gender: feminine)
089.	068.0.	001.0	**aethiopellus**	(Hoffmansegg, 1806)	Papilio aethiopellus Replacement name for [Papilio] aethiops minor de Prunner, 1798 Lepidoptera pedemontana, p. 70, no. 138.	Mag. f. Insektenk. (Illiger), 5: 180.	[Italy: Piemonte:] "in Alpibus" by replacement.
089.	068.0.	001.1		**gorgophone**	Erebia gorgophone Bellier de la Chavignerie, 1863	Ann. Soc. ent. Fr., (4) 3: 419, no. 1, Pl. 9, Figs 1-3.	[France:] Basses Alpes [=Alpes de Haute Provence]: Barcellonette.
089.	068.0.	002.0	**aethiops**	(Esper, [1777])	P.[apilio] aethiops	Die Schmetterlinge in Abbildungen nach der Natur..., 1 [1] Die Tagschmetterlinge. Pl. 25, Fig. 3, text [1779] p. 312.	"bei uns" [Germany; Bayern: Erlangen]
089.	068.0.	002.1		medea	[Papilio] medea Hübner, [1800]. A junior primary homonym of Papilio medea Fabricius, 1775, Syst. ent., 508, no. 273, LT: "India" [recte S. America]. Currently a synonym of Catonephele acontius Linné, 1771, Mantissa plant., 2: 537, TL: "in China" [i.e. South America]	Samml. europ. Schmett., 1, Pl. Pap. 48, Figs 220-222; text [1806] 1: 37, no. 58.	In all [European] forests.
089.	068.0.	003.0	**albergana**	(de Prunner, 1798)	Pap.[ilio] alberganus	Lepidoptera pedemontana, p. 71, no. 140.	[Italy: Piemonte:] [Monte / Colle Albergian](by implication) "Alpibus rarissima"

089.	068.0.	003.1		**ceto**	Papilio ceto Hübner, [1804]	Samml. europ. Schmett., 1, Pl. Pap. 112, Figs 578,579; text [1806] 1: 34, no. 48.	Switzerland: "by the glaciers"
				themistocles	P.[apilio] themistocles de Loche, 1801	Mem. R. Accad. Sci. Torino, 11: 142, no. 4, Pl. 6, Fig. 4.	[Italy: Piemonte] au bois noir au dessus de Suze [= Susa]
089.	068.0.	004.0	**calcaria**	Lorkovic, 1953	Erebia tyndarus calcarius	Rad jug. Akad. Znan., Umj., 294: 169, Pl. 1, Figs 1 12.	[Slovenia]: Mojstrovka, 1600 m
089.	068.0.	005.0	**dromus**	(Fabricius, 1793)	Papilio dromus	Entomologia systematica emendata, 3 (1): 224, no. 701.	"Habitat In Italy D.[ominus] Allioni" [W Piemonte: upper Valley of Susa. LTR in this paper]
089.	068.0.	005.1		**carmenta**	Erebia tyndarus carmenta Fruhstorfer, 1909	Societas entomologica, 24 (16): 125.	[Italy: Val d'Aosta:] Courmayeur
089.	068.0.	005.2		arvernensis	Erebia tyndarus var. arvernensis Oberthür, 1908 A Nomen Nudum.	Bull. Soc. ent. Fr., 1908 (15): 267.	France: montagnes françaises [Auvergne]
089.	068.0.	006.0	**cassioides**	(Hohenwarth, 1792)	Papilio cassioides	In: Reiner & Hohenwarth, 1792 Botanische Reisen oberkärntnerischen Alpen, 1: 262, Pl. 6 Fig. 1.	[Austria: Oberkärnten:] ersten Alpenwiesen der höchsten Pasterze [am Grossglockner](NT: Grossglockner: Zirknitztal, Lattes et al., 1994 Nota lepid., Suppl. 5: 103).
089.	068.0.	007.0	**christi**	Rätzer, 1890	Erebia christi	Mitt. schweiz. ent. Ges., 8 (6): 220.	[Switzerland: Wallis:] Laquinthal [Lagginthal], Simplon [southern slopes]
089.	068.0.	008.0	**epiphron**	(Knoch, 1783)	Papilio epiphron	Beitr. Insektengesch., 3: 131, Pl. 6, Fig. 7.	[Germany: Harz:] Brocken: Oderbrück
089.	068.0.	009.0	**eriphyle**	(Freyer, 1836)	Hipparchia Papilio eriphyle	Neuere Beitr. SchmetterlingsK., 2 (32): 150, no. 325, Pl. 187, Fig. 3, 4 (Dir. 4 ICZN).	[Switzerland:] Bernese mountains
089.	068.0.	010.0	**euryale**	(Esper, [1805])	P.[apilio] euryale	Die Schmetterlinge in Abbildungen nach der Natur..., Suppl. Theil 2, p. 8, Pl. 118, Figs 2, 3.	[Poland/Czech Rep.:] Riesengebirge
089.	068.0.	011.0	**flavofasciata**	Heyne, 1895	[Erebia] flavofasciata	In Rühl, Palaearkt. GrossSchmett., 1: 805 806, no. 476.	[Switzerland:] Ticino: Passo di Campolungo
089.	068.0.	012.0	**gorge**	(Hübner, [1804])	[Papilio] gorge	Samml. europ. Schmett., Pl. Pap. 99, Figs 502-505; text [1806] 1: 39, no. 65.	Alps of Tyrol and Switzerland
089.	068.0.	012.1		medon	Pap.[ilio] medon. Junior primary homonym of Papilio medon Linné, 1763, Amoenitates acad., 6: 402, no. 53, LT: "Habitat in Indiis" [recte: tropical Africa] (currently Euphaedra medon)	Lepidoptera pedemontana, p. 71, no. 141.	[France: Alpes de Haute Provence:] "Barcellonetis"
089.	068.	012.1		**hecuba**	Erebia hecuba Prola, Prola, Hartig, 1940	Boll. Soc. ent. ital., 72(8): 114.	[Italy, Abruzzo] Gran Sasso d'Italia, above Campo Imperatore: 2200 m
089.	068.0.	013.0	**ligea**	(Linné, 1758)	Papilio ligea	Syst. nat. (ed. x), 1: 473, no. 97 (Op. 506 ICZN).	"Europa" [Sweden: LTR Verity 1953 Farfalle diurne d'Italia, 5: 221]
089.	068.0.	014.0	**manto**	([Denis &	P.[apilio] manto	Ankündung syst. Werkes Schmett.	Austria inferior: Schneeberg

				Schiffermüller], 1775)		wiener Geg., p. 169, no. 15.	(Neotype: Kudrna & Belicek, 2005 Oedippus, 23: 24).
089.	068.0.	015.0	**medusa**	(Fabricius, 1787)	Papilio medusa	Mantissa Insectorum, 2: 40, no. 410.	"Habitat in Austriae Punica, Dom. Schiffermüller"
089.	068.0.	015.1		medusa	P.[apilio] medusa [Denis & Schiffermüller], 1775). A Nomen Nudum (see Kudrna & Belicek, 2005 Oedippus, 23: 25)	Ankündung syst. Werkes Schmett. wiener Geg., p. 167, no. 10.	[Austria:] Wien. By implication (wiener Gegend)
089.	068.0.	015.2		medea	P.[apilio] medea P.[apilio] medusa [Denis & Schiffermüller], 1775). A Nomen Nudum (see Kudrna & Belicek, 2005 Oedippus, 23: 25) and a primary homonym of Papilio medea Fabricius, 1775.	Ankündung syst. Werkes Schmett. wiener Geg., p. 167, no. 7.	[Austria:] Wien. By implication (wiener Gegend)
089.	068.0.	015.2		medea	[Papilio] medea Borkhausen, 1788. A junior primary homonym of Papilio medea Fabricius, 1775, Syst. ent., 508, no. 273, LT: "India" [recte S. America]. Currently a synonym of Catonephele acontius Linné, 1771, Mantissa plant., 2: 537, TL: "in China" [i.e. South America]	Naturgeschichte der europäischen Schmetterlinge, 1: 74, no. 14.	[Austria:] Wien. By reference to Schiffermüller.
089.	068.0.	016.0	**melampus**	(Fuessly, 1775)	Papilio melampus	Verz. bekannt. schweiz. Ins., p. 31, no. 604, Pl. 1, Fig. 6.	[Switzerland:] Alps of the Grisons and Glarus
089.	068.0.	017.0	**meolans**	(de Prunner, 1798)	Pap.[ilio] meolans	Lepidoptera pedemontana, p. 71, no. 143.	[Italy: Piemonte:] "montibus rarus"
089.	068.0.	017.1		**pirene**	[Papilio] pirene Hübner, [1800]	Samml. europ. Schmett., Pl. Pap. 48, Figs 223, 224; text [1806] 1: 37, no. 59 (as Papilio irene [sic!]).	Alps of Switzerland
089.	068.0.	017.2		**stygne**	Papilio stygne Ochsenheimer, 1807	Schmett. Europa, 1 (1): 276.	[Austria:] Alps of Tyrol and Switzerland
089.	068.0.	018.0	**mnestra**	(Hübner, [1804])	[Papilio] mnestra	Samml. europ. Schmett., Pl. Pap. 106, Figs 540-543; text [1806] 1: 33, no. 43.	Alps of Switzerland
089.	068.0.	019.0	**montana**	(de Prunner, 1798)	Pap.[ilio] montanus	Lepidoptera pedemontana, p. 71, no. 144.	[Italy: Piemonte:] "in montibus rarus"
089.	068.0.	019.1		**goante**	Papilio goante Esper, [1804]	Die Schmetterlinge in Abbildungen nach der Natur..., Suppl. Theil 1, p. 115, Pl. 116, Fig. 1.	[Switzerland:] Luzern: "Thalalpen"
089.	068.0.	020.0	**neoridas**	(Boisduval, [1828])	Satyrus neoridas	Europaeorum lepidopterorum index methodicus, 1: 23.	"Alpes" [France: Grenoble LTR (Boisduval 1832 Icones historiques des lépidoptères d'Europe, 1: 148, Pl. 29)]
089.	068.0.	021.0	**nivalis**	Lorkovic & De Lesse, 1954	Erebia nivalis	Lambillionea, 54 (9 10): 66.	[Austria:] Gross Glockner: Oberer Pasterzen: [=pastures at the highest

							elevations] Hoffmannshütte: 2450 m.
089.	068.0.	022.0	**oeme**	(Hübner, [1804])	[Papilio] oeme	Samml. europ. Schmett., Pl. Pap. 104, Figs 530-533; text [1806] 1: 34, no. 46.	[Austria:] Alps of Tyrol
089.	068.0.	023.0	**ottomana**	Herrich-Schäffer, [1847]	Erebia dromus var. ottomana	Syst. Bearbeitung Schmett. Europas, Pl. 77, Fig. 376; Pl. 78, Figs 379, 380; Text [1858] 6: 8.	"Kleinasien"[=Turkey: Olymp: Brussa [= Bursa: Uludağ] LTR by selection by Lederer (1853 Verh. Zool-bot. Ges. Wien, 2: 45)].
089.	068.0.	024.0	**pandrose**	(Borkhausen, 1788)	[Papilio] pandrose	Naturgeschichte der europäischen Schmetterlinge, 1: 95, no. 34.	[Austria:] Steiermark
089.	068.0.	025.0	**pharte**	(Hübner, [1804])	[Papilio] pharte	Samml. europ. Schmett., Pl. Pap. 97, Figs 491-494; text [1806] 1: 33, no. 45.	Alps of Tyrol and Switzerland
089.	068.0.	026.0	**pluto**	(de Prunner, 1798)	Papilio pluto	Lepidoptera pedemontana, p. 20, no. 35.	[Italy: Piemonte:] "invenitur.in valle Varodisiana" [France: valley of the river Var]
089.	068.0.	026.1		**petrosa**	Pap.[ilio] petrosus de Prunner, 1798.	Lepidoptera pedemontana, p. 71, no. 141.	[Italy: Piemonte:] "Alpibus invenitur"
089.	068.0.	026.2		**alecto**	[Papilio] alecto Hübner, [1804]	Samml. Europ. Schmett., Pap. Pl. 101, Figs 515, 516; text [1806] 1: 38, no. 63.	[Austria:] Alps of Tirol and Switzerland
089.	068.0.	026.3		glacialis	Papilio glacialis Esper, [1804]. Primary homonym of Papilio glacialis Moll, 1785 In: Schrank & Moll, Naturhistorische Briefe über Oestreich, Salzburg, Passau und Berchtesgaden, 1: 102 (currently Oeneis glacialis)	Die Schmetterlinge in Abbildungen nach der Natur..., Suppl. Theil 1, p. 116, Pl. 116, Fig. 2.	[Switzerland:] Chamonix: [Mont Blanc:] on the glacier's summit
089.	068.0.	026.4		tisiphone	Papilio tisiphone Esper, [1805]. Primary homonym of Papilio tisiphone Rottemburg, 1775 Der Naturforscher, 6: 16, Pl. 1, Figs 1 27 (currently Dira clytus: S. Africa)	Die Schmetterlinge in Abbildungen nach der Natur..., Suppl. Theil 2, Pl. 122, Fig. 5, text [1830] p. 28 (as tissiphone ex errore, see p. 28).	Switzerland, Savoy, Tyrol: at the highest elevation
089.	068.0.	027.0	**pronoe**	(Esper, [1780])	P.[apilio] pronoe	Die Schmetterlinge in Abbildungen nach der Natur..., 1 (2) Der europ. Schmett., Forts. Tagschmett., p. 23, Pl. 54, Fig. 1.	[Austria:] Steiermark
089.	068.0.	028.0	**scipio**	Boisduval, 1832	Erebia scipio	Icones Historique des Lépidoptères nouveau ou peu connus. Collection des Papillons d'Europe,, 1: 152, Pl. 30, Figs 1-6.	[France:] Basses Alpes [=Alpes de Haute Provence].
089.	068.0.	029.0	**stiria**	(Godart, [1824])	Satyrus stirius	In: Latreille Encyclopédie méthodique, Histoire naturelle, 9 [2]: 530, no. 142.	[Austria:] Alpes de Stirie [=Steiermark]: Clagenfurt [=Klagenfurt]
089.	068.0.	029.1		**nerine**	Papilio Hipparchia nerine Freyer, [1831]	Neuere Beitr. SchmetterlingsK., 1 (3): 26, no. 18; Pl. 13, Fig. 3, [nec Fig 4].	Alps of the Oberkrain [= Slovenia]

089.	068.0	030.0	**styx**	(Freyer, 1834)	Papilio Hipparchia styx	Neuere Beitr. SchmetterlingsK., 2 (21): 44, no. 212; Pl. 121, Fig. 4 (Dir. 4 ICZN).	Switzerland etc.: [Graubünden: Ofenpass [= Pass dal Fuorn]: God Valbella 400 m N Rombachquelle (Il Rom) 1920 m; LTR: Sonderegger, 2005 . Die Erebien der Schweiz, p. 529]
089.	068.0.	031.0	**triaria**	(de Prunner, 1798)	Pap.[ilio] triarius	Lepidoptera pedemontana, p. 70, no. 139.	[Italy: Piemonte: Torino]: "Exilles".
089.	068.0.	031.1		**bonellii**	[Papilio] bonellii Hübner, [1826]	Samml. europ. Schmett., Pl. Pap. 181, Figs 892-895; no text.	[Italy: Piemonte] LTR (Hemming, 1931 Trans ent. Soc. Lond., 79: 501. [since the name was dedicated to a person who lived in Turin])
089.	068.0.	031.2		**evias**	Satyre [sic!] evias Godart, 1823	Tableau méthodique des Lépidoptères ou Papillons de France, p. 22, no. 44.	France: Hautes Pyrénées.
089.	068.0.	032.0	**tyndarus**	(Esper, [1781])	P.[apilio] tyndarus	Die Schmetterlinge in Abbildungen nach der Natur..., 1 (2) Der europ. Schmett., Forts. Tagschmett., p. 97, Pl. 67, Fig. 1.	Switzerland
089.	069.0.		**Oeneis**	Hübner, [1819]	Papilio norna Thunberg, 1791 Ins. Suec., 2 (36): P. [unnumbered], Fig. 11. By selection by Butler, 1868 Entomologist's month. Mag., 4: 196.	Verz. bekannt. Schmett., (4): 58.	(gender: feminine)
				Chionobas Boisduval. [1833],	Papilio aello Hubner, [1804], Samml. europ. Schmett., Pl. Pap. 102, Figs 519-521. By selection by Blanchard, 1840, Hist. nat. Ins., 3: 457-458.	Icon. hist. Lépid. Europe, 1 (17/18): 182.	(gender: masculine)
089.	069.0.	001.0	**glacialis**	(Moll, 1783)	Papilio glacialis	In: Schrank & Moll, Naturhistorische Briefe über Oestreich, Salzburg, Passau und Berchtesgaden, 1: 102.	Austria: Zillertal
089.	069.0	001.1		**aello**	[Papilio] aello Hübner, [1804]	Samml. europ. Schmett., Pl. Pap. 102, Figs 519-521; text [1806] 1: 24, no. 12.	[Austria:] "Die Alpen des Tyrols" [Fürstenfeld LTR see Verity, 1950, Farfalle diurne d'Italia, 5: 282]
089.	070.0.		**Melanargia**	Meigen, [1828]	Papilio galathea Linné, 1758 (Syst. Nat. (ed. x), 1: 474) by selection by Kirby, 1894 Allen's Nat. Libr., Lepid., 1: 240 (conserved under the plenary power. Op. 400 ICZN)	Syst. Beschr, Europ. Schmett., 1 (3): 97.	(gender: feminine)
089.	070.1.			Arge Hübner, [1819]	[Papilio] psyche Hübner, [1800] Samml. europ. Schmett., Pl. 44, Figs 198, 199. By selection by Hemming, 1967, Bull. BM (NH), Ent., Suppl. 9: 54. A junior homonym of Arge Schrank (1802, Fauna Boica, 2 (2), 209,	Verz. bekannt. Schmett., (4): 60.	(gender: feminine)

					no. 231. Hymenoptera) (Op. 400 ICZN)		
089.	070.1.			Agapetes Billberg, 1820	Papilio galathea Linné, 1758 (Syst. Nat. (ed. x), 1: 474) by selection by Scudder, 1875 Proc. Amer. Acad. Arts Sci., Boston, 10: 104. Name suppressed under the plenary power for the purposes of the Principle of Priority but not for those of the Principle of Homonymy Op. 400 ICZN)	Enum. Ins. Mus. Billberg, p.78.	(gender: masculine)
089.	070.2.			**Argeformia** Verity, 1953	Papilio arge Sulzer, 1776 Abgek. Gesch. Insecten, p 144.	Farfalle diurne d'Italia, 5: 47, 49.	(gender: feminine)
089.	070.0.	001.0	**arge**	(Sulzer, 1776)	Papilio arge	Abgek. Gesch. Insecten, p 144, no. 8, 9, Pl. 16, Figs 8, 9.	"Sicilien" [= Italy: "Regno delle due Sicilie": Campania]
089.	070.0.	001.1		**sicula**	[Papilio] arge sicula Borkhausen, 1788	Naturgeschichte der europäischen Schmetterlinge, 1: 107, no. 50.	"Sicilien" [= Italy: "Regno delle due Sicilie": Campania]
089.	070.0.	002.0	**galathea**	(Linné, 1758)	Papilio galathea	Syst. nat. (ed. x), 1: 474, no. 99 (Op. 400 ICZN).	"Germania et Europa australis" (Germany: LTR Verity 1953 Farfalle diurne d'Italia, 5: 63)
089.	070.0.	003.0	**occitanica**	(Esper, [1789])	Arge occitanica	Die Schmetterlinge in Abbildungen nach der Natur..., Suppl. Theil 1, p. 17, Pl. 96, Fig. 3, 4.	[France:] Languedoc, Dauphiné
089.	070.0.	003.1		**syllius**	Papilio syllius Herbst, 1796	Natursyst. Bekannt. Ins., 8: 15, no. 3. Pl. 182, Figs 8, 9.	[France:] Languedoc.
089.	070.0.	003.2		**psyche**	[Papilio] psyche Hübner, [1800]	Samml. europ. Schmett., Pl. 44, Figs 198, 199; text [1806] 1: 32, no. 40.	"England" [recte France: Dauphiné see Hübner, [1806] Samml. europ. Schmett., text. 1: 32, no. 40]
089.	070.0.	004.0	**pherusa**	(Boisduval, 1833)	Arge pherusa	Icones Historique des Lépidoptères nouveau ou peu connus. Collection des Papillons d'Europe, 1: 141, Pl. 26, Figs 4-6.	[Italy:] Sicily
089.	070.0.	005.0	**russiae**	(Esper, [1783])	Arge russiae	Die Schmetterlinge in Abbildungen nach der Natur..., 1 (2) Der europ. Schmett., Forts. Tagschmett., Pl. 84, Fig. 1, 2, text [1783] p.162.	Steppes of southern Russia [recte SE], from Sebastianoska [= Sevastianovskij] as far as above Pensa [=Penza]
089.	070.0.	005.1		**japygia**	Papilio japygia Cyrillo, 1787	Entomologiae neapolitanae specimen primum, Pl. 3, Fig. 5 & p. [12], no. 5. 5.	"habitat in Japygia" (=Napoli region)
089.	071.0.		**Maniola**	Schrank, 1801	Papilio jurtina Linné, 1758 Syst. Nat. (ed. X), 1: 475. By selection by Scudder, 1875 (Proc. amer. Acad Arts Sci., Boston, 10: 211) (Op. 506 ICZN)	Fauna Boica, 1 (2): 152, 170.	(gender: feminine)
089.	071.1.			Epinephele Hübner, [1819]	Papilio jurtina Linné, 1758 (Syst. Nat. (ed. x), 1: 475) by selection by Butler, 1868 Entomologist's month. Mag., 4: 194	Verz. bekannt. Schmett., (4): 59.	(gender: feminine)

089.	071.0.	001.0	**jurtina**	(Linné, 1758)	Papilio jurtina A name to take precedence over Papilio janira Linné, 1758, Syst. Nat. (ed. x), 1: 475. (Op. 506 ICZN)	Syst. nat. (ed. x), 1: 475, no. 104.	"Europa. Africa" (NW Africa, on the basis of the specimen preserved in the Linnean collection, in London Verity, 1913 Boll. Soc. ent. Ital., 44: 206)
089.	071.0.	001.1		**janira**	Papilio janira Linné, 1758. A name to rank in precedence below Papilio jurtina Linné, 1758. Syst. Nat. (ed. x), 1: 475. (Op. 506 ICZN)	Syst. nat. (ed. x), 1: 475, no. 106.	"in the forests of Europe"
089.	071.0.	002.0	**nurag**	(Ghiliani, 1852)	Satyrus nurag	Mem. Accad. Sci. Torino, (2) 14: 211.	[Italy:] Sardinia
089.	072.0.		**Hyponephele**	Muschamp, 1915	Papilio lycaon Rottemburg, 1775 Der Naturforscher, 6: 17. By monotypy.	Entomologist's Rec. J. Var., 27: 156.	(gender: feminine)
089.	072.0.	001.0	**lupina**	(Costa, [1836])	Satyrus lupinus	Fauna Regno Napoli, Lepidotteri: [69], [311], pls. (Lep. dium.) 4, figs 3, 4 [not 1, 2 as written in the text].	[Italy:] “Terra d'Otranto” (LE): Bosco di Guagnano
089.	072.0.	001.1		**rhamnusia**	Papilio Hipparchia rhamnusia Freyer, [1845]	Neuere Beir. SchmetterlingsK., 5 (77): 125, no. 817; Pl. 457, Figs 2, 3.	[Italy:] Sicily: [Monte] Etna
089.	072.0.	002.0	**lycaon**	(Küns, 1774)	[Papilio] lycaon	Der Naturforscher, Halle, 3: 21, Pl. 2, Fig. d.	[Germany: Thuringien:] Eisenach
089.	072.0.	002.1		**eudora**	P.[apilio] eudora Esper, [1778]	Die Schmetterlinge in Abbildungen nach der Natur..., 1 [1] Die Tagschmetterlinge, Pl. 45, Fig. 1, text [1779] p. 374.	[Germany:] Sachsen
089.	073.0.		**Aphantopus**	Wallengren, 1853	Papilio hyperantus Linné, 1758 Syst. nat. (ed. x), 1: 471. By monotypy.	Skand. Dadfjä., p. 9, 30r	(gender: masculine)
089.	073.0.	001.0	**hyperantus**	(Linné, 1758)	Papilio hyperantus	Syst. nat. (ed. x), 1: 471, no. 85.	"Europa" (Sweden: LTR Verity 1953 Farfalle diurne d’Italia, 5: 232)
089.	074.0.		**Pyronia**	Hübner, [1819]	Papilio tithone Hübner, [1819] Verz. bekannt. Schmett., (4): 59. As defined by the lectotype of Papilio tithonus Linné, 1767 Mantissa plantarum...Regnum Animale Appendix. Insecta. p. 537 which, by selection by Hemming, 1964 Annot. Lepid., (3): 93, represents also the lectotype of the nominal species. By selection by Scudder, 1875 Proc. Amer. Acad. Arts Sci., Boston, 10: 261.	Verz. bekannt. Schmett., (4): 59.	(gender: feminine)
089.	074.1.			**Idata** de Lesse, 1952	Epinephele ida var. cecilia Vallantin, 1894 Le Naturaliste, (2) 16 (185): 260. By original designation.	Ann, Soc. ent. Fr., 121: 72.	(gender: feminine)
089.	074.0.	001.0	**cecilia**	**(**Vallantin, 1894**)**	Epinephele ida var. cecilia	Le Naturaliste, (2) 16 (185): 260.	[Algeria: Constantine:] Boudaroua: Duvivier
089.	074.0.	002.0	**tithonus**	(Linné, 1767)	Papilio tithonus	Mantissa plantarum...Regnum Animale Appendix. Insecta. p. 537. As defined by the lectotype designated by	"Germania"

						selection by Hemming, 1964 Annot. Lepid., (3): 93.	
089.	074.0.	002.1		**pilosellae**	Papilio pilosellae Fabricius, 1775	Syst ent., p. 497, no. 233.	“Habitat in pilosella, plantagine Germaniae”
089.	075.0.		**Coenonympha**	Hübner, [1819]	Papilio geticus Esper, [1789] Die Schmetterlinge in Abbildungen nach der Natur..., Suppl. Theil 1, p. 51♀ [1789], Pl. 102, Fig. 2 ♂[1794], Pl. 107, Fig 5 [1798]. By selection by Butler, 1868 Entomologist's month. Mag., 4: 194.	Verz. bekannt. Schmett., (5): 65.	(gender: feminine)
089.	075.1.			**Lyela** Swinhoe, 1908	Lyela macmahoni Swinhoe, 1908 Ann. Mag. Nat. Hist., (8) 1: 60. By original designation.	Ann. Mag. Nat. Hist., (8) 1: 60.	(gender: feminine)
089.	075.2.			**Sicca** Verity, 1953	Papilio dorus Esper, [1782] Die Schmetterlinge in Abbildungen nach der Natur..., 1 (2) Der europ. Schmett., Forts. Tagschmett., p. 130, Pl. 78, Fig. 1. By original designation.	Farfalle diurne d’Italia, 5: 83.	(gender: feminine)
089.	075.3.			**Chortobius** [Dunning & Pickard], 1858	Papilio pamphius Linné, 1758 Syst. nat. (ed. x), 1: 472.	Accentuated List brit. Lep., p. 5.	(gender: masculine)
089.	075.0.	001.0	**arcania**	(Linné, 1761)	Papilio arcania	Fauna Svecica (ed. 2), p. 273, no. 1045.	Sweden? (by implication)
089.	075.0.	001.1		**seyta**	Pap.[ilio] seyta de Prunner, 1798	Lepidoptera pedemontana, p. 74, no. 153.	[Italy: Piemonte: Torino] “in silvis Stupinixi [=Stupinigi]
089.	075.0.	002.0	**corinna**	(Hübner, [1804])	[Papilio] corinna	Samml. europ. Schmett., Pl. Pap. 105, Figs 536, 537; text [1806] 1: 40, no. 70.	"Sicily" (probably ex errore;."Sardinia"?)
089.	075.0.	002.1		norax	Papilio Satyrus norax Bonelli, 1826	Memorie Accad. Sci. Torino, 30 (1): 183, Pl. 2, Figs 2, 2°.	[Italy:] Sardinia
089.	075.0.	003.0	**darwiniana**	Staudinger, 1871	Coenonympha arcania var. darwiniana	In: Staudinger & Wocke, Cat. Lepid. europaeischen. Faunengeb., 1: 32, no. 398 a.	"Alp. Helv. m. Ped. Gal. (et ? Germ. m.)" [=Alps of southern Switzerland, Piemonte, France (and S Germany ?)
089.	075.0.	003.1		**macromma**	Coenonympha arcania macromma Turati & Verity, 1910.	Boll. Soc. ent. ital., 42: 237. A male syntype was figured by Verity (1910 Boll. Soc. ent. ital., 42: 266 280, Pl. 1, Fig. 8).	[Italy: Prov. Cuneo:] Terme [di Valdieri].
089.	075.0.	004.0	**dorus**	(Esper, [1782])	P.[apilio] dorus	Die Schmetterlinge in Abbildungen nach der Natur..., 1 (2) Der europ. Schmett., Forts. Tagschmett., p. 130, Pl. 78, Fig. 1.	[France:] Languedoc
089.	075.0.	005.0	**elbana**	Staudinger, 1901	Coenonympha corinna v. elbana	In: Staudinger & Rebel, Cat. Lepid. pal. Faunengeb., 1: 66, no. 437a.	[Italy: Livorno: Isola d'] Elba
089.	075.0.	005.1		**trettaui**	Coenonympha corinna trettaui Gross, 1970.	Ent. Z., Frankf. a. M., 80 (17): 162, no. 2.	[Italy:] Insel Capraia

089.	075.0.	006.0	**gardetta**	(de Prunner, 1798)	Pap.[ilio] gardetta	Lepidoptera pedemontana, p. 74, no. 154.	[Italy: Piemonte:] “invenitur in Valle Varaitana” [Sant’Anna di Bellino: Borgata Gardetta]
089.	075.0.	007.0	**glycerion**	(Borkhausen, 1788)	[Papilio] glycerion	Naturgeschichte der europäischen Schmetterlinge, 1: 90, no. 27.	Not stated (Austria?, S Germany?)
089.	075.0.	007.1		iphis	P.[apilio] iphis [Denis & Schiffermüller], 1775. Primary homonym of Papilio iphis Drury, [1773] Ill. nat. Hist., 2: 26, Pl. 15, Fig. 2; [p. 91] (index). TL: "Sierra Leon, in Africa"	Ankündung syst. Werkes Schmett. wiener Geg., p. 321, no. 25.	[Austria:] Wien. By implication (wiener Gegend)
089.	075.0.	007.2		**bertolis**	Pap.[ilio] bertolis de Prunner, 1798	Lepidoptera pedemontana, p. 75, no. 155.	[Italy: Piemonte] “circa Castellum Delphinum [=Casteldelfino]
089.	075.0.	008.0	**oedippus**	(Fabricius, 1787)	Papilio oedippus	Mantissa Insectorum, 2: 31, no. 335.	“Russia meridionalis”
089.	075.0.	009.0	**pamphilus**	(Linné, 1758)	Papilio pamphilus	Syst. nat. (ed. x), 1: 472, no. 86.	"Europa" [Sweden: LTR Verity 1953 Farfalle diurne d’Italia, 5: 109]
089.	075.0.	010.0	**rhodopensis**	Elwes, 1900	Coenonympha tiphon var. rhodopensis	Trans. ent. Soc. Lond., 1900 1901: 205, no. 110.	Bulgaria: Rilo Dagh: 4000 7000 ft
089.	075.0.	011.0	**tullia**	(Müller, 1764)	Papilio tullia	Fauna insectorum Fridrichsdalina, p 36, no. 332.	“In agris.”; [Sjaelland = Zeeland, Denmark] “Fridrichsdal” implied from the title of the work.
089.	075.0.	012.0	**lyllus**	(Esper, [1805])	Papilio lyllus	Die Schmetterlinge in Abbildungen nach der Natur..., 1 (2) Der europ. Schmett., Forts. Tagschmett., p 23, Pl. 122, Figs 1.	in allen Gegenden von Portugal verbreitet
089.	075.0.	012.1		**sicula**	Hipparchia pamphilus var. sicula Zeller, 1847	Isis von Oken, [40] (2): 146.	[Italy: Sicily: Siracusa, Messina, between Messina and Catania, by implication for reference to Costa (1840. Fauna siciliana, Lepid, p. 2)].
089.	076.0.		**Pararge**	Hübner, [1819]	Papilio aegeria Linné, 1758 Syst. nat. (ed. x), 1: 473. By selection by Butler, 1868 Entomologist's month. Mag., 4: 195.	Verz. bekannt. Schmett., (4): 89.	(gender: feminine)
089.	076.0.	001.0	**aegeria**	(Linné, 1758)	Papilio aegeria	Syst. nat. (ed. x), 1: 473, no. 98.	"Europa meridionale"
089.	077.0.		**Lasiommata**	Westwood, 1841	Papilio megera Linné. 1767 Syst. nat. (ed.xii), 1 (2): 771. By selection by Scudder, 1875 Proc. Amer. Acad. Arts Sci., Boston, 10: 202.	In: Humphreys & Westwood, Brit. Butt. Transformations, [ed. 1]: 65.	(gender: feminine)
089.	077.1.			**Lopinga** Moore [1893]	Pararge dumetorum Oberthür, 1886 Études Ent., 11: 23, Pl. 4, Fig. 20. By original designation.	Lep. ind., 2 (13): 11.	(gender: feminine)
089.	077.2.			"Dira" Auctorum nec Hübner, [1819]	Papilio clytus Linné, 1764 Museum…Ludovicae Ulricae..., p. 268. By selection by Scudder, 1875 Proc. Amer. Acad. Arts Sci., Boston, 10:	Verz. bekannt. Schmett., (4): 60.	(gender: feminine)

					157..		
089.	077.0.	001.0	**achine**	(Scopoli, 1763)	Papilio achine	Entomol. Carn., p. 156, no. 433, Pl. 18, Fig. 433.	"Carniola" [=Slovenia: Kranjska] (by implication)
089.	077.0.	002.0	**maera**	(Linné, 1758)	Papilio maera	Syst. nat. (ed. x), 1: 473, no. 96.	Not stated (Sweden: LTR Verity 1953 Farfalle diurne d'Italia, 5: 32)
089.	077.0.	003.0	**megera**	(Linné, 1767)	Papilio megera	Syst. nat. (ed.xii), 1 (2): 771, no. 142.	"Austria; Dania"
089.	077.0.	004.0	**petropolitana**	(Fabricius, 1787)	Papilio maera var. petropolitana	Mantissa Insectorum, 2: 36, no. 373.	Not stated ("probably Leningrad" [= Russia: Sankt Petersburg] LTR Verity, 1953 Farfalle diurne d'Italia, 5: 42)
089.	077.0.	005.0	**paramegaera**	(Hübner, [1824])	[Papilio] paramegaera	Samml. europ. Schmett., Pl. Pap. 170, Figs 842-844.	no text [Italy: Sardinia LTR Verity, 1953, Farfalle diurne d'Italia, 5: 86]
089.	077.0.	005.1		**tigelius**	Papilio Satyrus tigelius Bonelli, 1826	Mem. Accad. Sci. Torino, 30 (1): 181, Pl. 1, Fig. 2, 2a, 2b.	[Italy:] Sardinia
089.	078.0.		**Danaus**	Kluk, 1780	Papilio plexippus Linné, 1758 (Syst. Nat. (ed. x), 1: 471), as interpreted by the neotype designated under the plenary power, namely the male specimen figured by Clark, 1941 (Proc. US nat. Mus., 90: Pl. 71, Fig. 1) and refigured in Opinion 282. (restricted type locality: 'Kendall, New York State' Op. 278) See also Hemming, 1933 Entomologist, 66: 222.	Zwierz. Hist. nat. pocz. gospod., 4: 84.	(gender: masculine)
089.	078.1.			**Anosia** Hübner, 1816	Papilio gilippus Cramer, [1775] Uitl. Kapellen, 1 (3): 41, Pl. 26, Figs E, F. By selection by Scudder, 1875 Proc. Amer. Acad. Arts Sci., Boston, 10: 113.	Verz. bekannt. Schmett., (1): 16.	(gender: feminine)
089.	078.0.	001.0	**chrysippus**	(Linné, 1758)	[Papilio] chrysippus	Syst. nat. (ed. x), 1: 471, no. 181.	"Aegypto, America" (recte China: Canton LTR Corbet, 1949 Proc. R. ent. Soc. Lond., (B) 18 (9/10): 192, 195, since Linné had obtained the relevant speciems from Peter Osbek, in 1751)
089.	078.0.	001.1		**asclepiadis**	Papilio asclepiadis Gagliardi, 1911	Atti R. Ist. Incoraggiamento, 1 (1): 160.	"Advena ex India orientali in rus meum ad Vesevum" [= Torre del Greco]

NOTES

089.001.0	The genus *Pyrgus* includes 39 Palearctic species, 10 in N. America (4 are exclusively N. American), about 15 S. American species (5 of which occur also in N. America) and 1 (*P. crisia*) in the Caribbean. Only *P. centaureae* occurs on both sides of the Atlantic Ocean (see de Jong, 1972. Tidjschr. Ent., 115: (1): 1–122, 6 Pls). The date of publication of the genus name has been defined by Op. 150 (and Dir. 4 ICZN). See Warren *et al.*, (2009. Syst. ent., 34 (3): 467–523 for a molecular phylogeny of the Hesperiidae).
089.001.0.001.0	*Pyrgus accretus* ranges from the Pyrenees to N.W. Italy, the Jurassic Alps and S.W. Germany. In the Ligurian, the Maritime and the Cottian Alps it occurs in cohabitation with *P. alveus* and/or *P. warrenensis*. The diagnostic characters of the male genitalia are described in Balletto *et al.*, 1983 (Boll. Soc. ent. ital., 115 (4–7): 111–115; see also Renner, 1991. Neue ent. Nachr., 281–157) and include a distally and ventrally more protruding "cuiller" (see de Jong, 1972. Tidjschr. Ent., 115: (1): 19, 86–87 for other details). Differences between *P. alveus*, *P. warrenensis* and *P. accretus* are of totally comparable magnitude.
089. 001.0. 004.1	Apart from this case ("*Syrichtus alveus* forma *cirsii-siciliae*"), a number of other names published by Oberthür in his Études may be subjectively considered published as trinomens (and therefore nomenclaturally available), or in quadrinomy (and as such unavailable). It all hinges on whether the intervening hyphen is deemed to join names, or as a separator between them. Following the general trend among lepidopterists, we reluctantly list this name as unavailable. However, literally following the ICZN (hyphenated names: Art. 32.5.2.), it should be spelled as "cirsiisiciliae" and deemed available, although subjectively unnecessary, to designate the Sicilian populations of *Pyrgus armoricanus*. No specific provision is currently included in the ICZN for this kind of hyphenated names, for which Art. 32.5.2.4.3 ICZN does not apply.
089.001.0.005.0	The names *Hesperia cacaliae*, *H. carlinae*, *H. serratulae*, *H. onopordi*, *H. cirsii*, appeared first on plate 8, which was published in livraison 4 of Faune entomologique de l'Andalousie, in 1839. The corresponding text (livraison 5) was published only in 1840. Thus, these names date from livr. 4. See Higgins (1958. J. Soc. Bibliogr. nat. Hist. 3: 311–318).
089.001.0.006.0	See the previous note 089.001.0.005.0.
089.001.0.007.0	Since the 'Wiener Verzeichnis' was published anonymously, its authorship and dates of publication have long been controversial. On the basis of a letter that Schiffermüller sent to Linné, Kudrna & Belicek (2005. Oedippus, 23: 1–32, figs 1–7) have suggested that Schiffermüller was the only author. In contrast, Sattler & Tremewan (2009. Nota lepid., 32 (1): 3–10) have contended that several independent authors working in those times apparently thought that the book had been authored by "die Theresianer" (i.e. more than one). Furthermore, Denis, in 1780, had listed himself as second co-author, in a catalogue of the Garelli library, of which he was himself librarian. Both Kudrna & Belicek's and Sattler & Tremewan's papers have their merits and it may well be that a full clarification will never be reached in any direction, at least as concerns authorship(s). At least for the moment, therefore, the matter remains settled by Op. 516 of the ICZN, which states that the Verzeichnis was published between 17th May 1775 and 8th December 1775 and that its authors were Denis & Schiffermüller.
089.001.0.007.1, 2	The correct name to designate this species would have been *Papilio fritillarius* Poda, 1761 (see note 089.001.0.007.2). The International Commission, however, took the slightly ambiguous course of including the name [*Papilio*] *carthami* in the "Official Lists and Indexes of Names in Zoology" (1990. Bull. zool. Nom., 49: 160; Op. 1599), and declared it "available". The ICZN, in fact, actually took no position as regards *Papilio fritillarius* Poda and *Papilio fritillum* [Denis & Schiffermüller]. Since Hübner's name had no special need for being conserved, we argue that its position in the "Official List" gives it "de facto" precedence over its synonyms listed in our "Nomenclature" table as #089.001.0.007.1 and #089.001.0.007.2, but this interpretation may be disputable. One can also observe, in this connection, that any taxonomic interpretation of *Papilio fritillarius* Poda and *Papilio fritillum* [Denis & Schiffermüller] may be subjective, so that they are probably best regarded as "nomina dubia" (see ICZN: glossary).
089.001.0.008.0	*Pyrgus centralitaliae* is separated from *P. alveus* by its external morphology and different male genitalia, where the "cuiller" is thicker and more roundedly pointed at the free margin than in *P. alveus*, of which it is often considered "subspecies". Since these differences are comparable in magnitude with those observed between other well established species of *Pyrgus*, we suggest that it is best regarded as a separate allopatric species (see Balletto & Cassulo 1995).

089.001.0.009.0	*Pyrgus cirsii* ranges over most of the Iberian Peninsula and as far to the N.E. and the W. Alps. In Italy it occurs only in a very restricted number of sites of the Ligurian Alps. As concerns its nomenclature, the names *Hesperia cacaliae*, *H. carlinae*, *H. serratulae*, *H. onopordi*, *H. cirsii*, appeared first on plate 8, which was published in livraison 4 of Faune entomologique de l'Andalousie, in 1839. The corresponding text (livraison 5) was published only in 1840. Thus, the names date from livr. 4. See Higgins (1958. J. Soc. Bibliogr. nat. Hist. 3: 311–318).
089.001.0.010.0	The names *Syrichtus alveus* f. *foulqieri* and *Syrichtus alveus* f. *bellieri* were simultaneously published by Oberthür (1910). Art. 24.2.1 and Art. 24.2.2 (ICZN) require that the first of these names takes precedence over the second, since the First Reviser, i.e. Rebel (1914. Verh. k. k. zool.-bot. Ges. Wien 64: [189]–[201]), explicitly stated that *bellieri* was a variety of *foulquieri* and thereby determined the precedence between these names. Reverdin (1916. In Oberthür, Études de Lépidoptèrologie Comparée, 12: 13, 30) took the opposite course, but his (belated) action is invalid.
089.001.0.010.1	Before ICZN rendered Op. 1944, the name *Papilio sylvanus* Esper, [1777] was invalid as a junior primary homonym of *Papilio sylvanus* Drury, 1773. As a consequence, Hemming (1934: 15 May) had proposed the name *Ochlodes alexandra*, to replace it. By effect of Op. 1944, this substitution has become unnecessary and Hemming's name, invalid. *Augiades esperi* Verity, 1934 (Entomologist's Rec. J. Var., suppl., p. 13, 24 May), was also proposed as a replacement name, for Esper's name and is also invalid for the same reason. See also notes by Hemming, 1934 (Stylops, 3 (9): 200).
089.001.0.011.0	In Italy, *Pyrgus malvae* only occurs in the E. Alps, at a restricted number of sites.
089.001.0.012.0	*Pyrgus malvoides* has parapatric range with respect to *P. malvae*, from which it is separated by strong genitalic differences, including a curved uncus (never bifid at apex), descending subunci (not applied to tegumen), as well as narrower valvae. Although it is considered a separate species from *P. malvae* in Catalogue of Life, Fauna Europaea, PESI and Funet, this taxon is treated as a synonym (subspecies?) of *P. malvae* by Kudrma *et al.* (2012).
089.001.0.013.0	"Faune entomologique de l'Andalousie" was published in separate instalments, from 1837 to 1840. The names *Hesperia cacaliae*, *H. carlinae*, *H. serratulae*, *H. onopordi*, *H. cirsii*, appeared first on plate 8, which was published in 1839 (livraison 4). The corresponding text (livraison 5) was published only in 1840. Thus, the names date from livr. 4. See Higgins (1958. J. Soc. Bibliogr. nat. Hist. 3: 311–318).
089.001.0.014.0	*Pyrgus picenus* is separated from *Pyrgus foulquieri* by its "cuiller", which is slenderer, shorter and more rounded at rear margin. Although it is often listed as an allopatric "subspecies" of *P. foulquieri*, we subjectively think it is best regarded as a separate allopatric species (Balletto & Cassulo 1995).
089.001.0.015.0	The names *Hesperia cacaliae*, *H. carlinae*, *H. serratulae*, *H. onopordi*, *H. cirsii*, appeared first on plate 8, which was published in 1839, in livraison 4 of Faune entomologique de l'Andalousie. The corresponding text (livraison 5) was published only in 1840. Thus, the names date from livr. 4. See also Higgins (1958. J. Soc. Bibliogr. nat. Hist. 3: 311–318).
089.001.0.016.0	For the dates of publication of Esper's "Die Schmetterlinge in Abbildungen nach der Natur etc." we have followed Heppner (1981. Archives nat. Hist., 10 (2): 251–254, and 1982. J. Lep. Soc., 36 (2): 91–92).
089.002.0	The genus *Spialia* includes a total of 29 species, 18 of which are confined to the Afrotropical Region (6 of the latter reach S.W. Arabia). Species having at least partially Palearctic range are 11 (see de Jong, 1974 Tijdschr. Ent., 117: 225–271; 1978. Tijdschr. Ent., 121 (3): 23–146).
089.002.0.001.0	*Spialia orbifer* occurs in Italy only in Sicily (de Jong 1974. Tijdschr. Ent., 117 (6): 225–271).
089.002.0.002.1	The name *Papilio hibiscae* was originally published in Hübner, [1793], "Der Schmetterlinge Lepidoptera Linnei", p. 15. Since this publication was rejected for nomenclatural purposes by ICZN (Op. 975) and since Hübner himself, as well as all other later authors, have disregarded it ever since its publication, the name's priority must be attributed to Hemming (1936).
089.002.0.003.0	*Spialia sertorius* and *S. therapne* are obviously distinct in external morphology, and even though their male genitalia are similar, *S. therapne* has shorter and stouter gnathos and shorter and broader cuiller. Although de Jong (1974. Tijdschr. Ent., 117 (6): 248), considered *Spialia therapne* a "subspecies" within the "superspecies" complex of *S. sertorius*, we subjectively prefer to maintain the 2 taxa separated at species level. In Italy, *S. therapne* occurs only in Sardinia.
089.003.0	The genus *Carcharodus* includes 8 species and is entirely Palearctic (Central-Asiatic-European. See Evans, 1949. A catalogue of the Hesperiidae from Europe, Asia & Australia in the British Museum (N.H.), 502pp, 53 Pls). The date of publication of this name was fixed by ICZN (Op. 150 & Dir. 4).
089.003.1	*Reverdinus* is a junior subjective synonym of *Carcharodus*.

089.003.2	Blanchard's (1845) type species designation of the genus *Syrichtus* (*Papilio malvae* Hübner ([1803] Samml. eur. Schmett., Pl. Pap. 90, Figs 450, 451) is perfectly valid. It must be noted, however, that (as it was fully realised by Boisduval) the name *Papilio malvae* "sensu" Hübner is a misidentification of *Papilio malvae* Linné, 1758. Blanchard's type-species designation, therefore, falls under Art. 69.2.4 of ICZN, and the type species meant by Blanchard is actually *Papilio malvarum* Hoffmansegg, 1804 (see note 089.003.0.001.1). The name *Syrichtus* is therefore a subjective synonym of *Carcharodus*, even though the name *P. malvarum* was originally published also as a synonym of *Papilio alceae* Esper, [1780] (see ICZN Art. 16.6.1). See the discussion accompanying Op. 181 ICZN for a detailed discussion of this issue. The name *Syrichtus* cannot be used to designate species otherwise sometimes classified under *Sloperia* under any taxonomic treatment.
089.003.3	*Lavatheria* is a junior subjective synonym of *Carcharodus*.
089.003.0.001.0	The name *Papilio alchymillae* Hübner, [1793], which first appeared in Der Schmetterlinge Lepidoptera Linnei, p. 15, is invalid, since it was included in a work rejected for nomenclatural purposes (Op. 975 ICZN). Since Hübner himself, as well as all other later authors, have disregarded it, this name was only validated by Hemming in 1936 (Proc. R. ent. Soc. Lond., (B) 5: 124, see Op. 975 ICZN).
089.003.0.001.1	The name [*Papilio*] *malvarum* was created as a substitution name for [*P.*] *malvae* "sensu" Hübner [1803] (nec Linné, 1758), as well as with reference to Fabricius (1775. Ent. syst., 3 (1): 350. no. 333), Denis & Schiffermüller (1775. Ankündung syst. Werkes Schmett. wiener Geg., p. 159, no. 1, a Nomen Nudum) and Borkhausen (1778. NatGes eur. Schmett., 1:185). None of the descriptions and/or pictures published by these authors corresponded to the species described as *Papilio malvae* by Linné, 1758. Although [*Papilio*] *malvarum* was also originally published as a synonym of *P.*[*apilio*] *alceae* Esper, [1780] this does not make it automatically unavailable (ICZN Art. 16.6.1). *Papilio malvarum* is therefore a subjective synomym (based on another holotype) of *Papilio alceae* Esper, [1780].
089.003.0.002.0	*Carcharodus baeticus* is a strictly xero-thermophilous species having, in Italy, very fragmented distribution.
089.003.0.003.1, 2	See de Jong (1974. Zool. Med., 48 (1): 1–9) for these synonymies and Heppner (1981) for the date of publication of *Papilio althaeae* Esper. Notwithstanding the slightly different original spelling (respectively without and with the *-ae* diphthong), *Papilio altheae* Hübner, [1803] is a primary homonym of *Papilio althaeae* Esper, [1783] (see Art. 58.1 ICZN).
089.003.0.003.0	Although a number of modern authors (see among the others Higgins & Riley 1975. Higgins 1975. Balletto & Cassulo 1995. Tolman & Lewington 1997, 2008; Kudrna *et al.* 2011) have spelled this name as *"flocciferus*", de Jong (1974. Zool. Med., 48 (1): 1–9) and Steyskal (1975. Proc. ent. Soc. Wash., 77 (1): 58) have observed that this name, whose original combination is *Hesperia floccifera*, should be correctly cited as *Carcharodus floccifer*. In many Latin compound words, in fact, the male-gender suffix for "bearing" is *-fer* so that the adjective for "tufted" (i.e. tuft-bearing) has an *-er* ending. Other authors, such as Evans (1949. Cat. Hesper. Europe etc. In BMNH), or Karsholt & Razowski (1996) have chosen not to follow Art. 31.2. ICZN on gender agreement between species-group names and genus-group names and wright this name "*floccifera*". We consider the latter option mistaken. The Code can be changed, always by acting along its own provisions, but should not be ignored.
089.003.0.003.3	The name *Hesperia* (*Spilothyrus*) *gemina* Lederer (1852. Verh. zool-bot. k. k. Ges. Wien, 2: 26) is a Nomen Nudum, which was validated by Alberti only in 1955 (Entsch. Lepidopt., 3: 136–138). The lectotypes and consequently the type locality were selected on p. 138 of the latter paper, on the basis of 2 co-types still present in Lederer's collection.
089.003.0.004.0	See Heppner (1981) for the date of publication of *Papilio lavatherae* Esper.
089.004.0	Even though the genus group name *Muschampia* and *Sloperia* were published by Tutt in the same year, volume and page, the correct name for this genus is *Sloperia* Tutt, [1906]. Article 24.2 of the ICZN states that in the case of genus group names published simultaneously and having as type species taxa of identical rank, precedence is fixed by the First Reviser. Hemming (1967. Bull. Brit. Mus. (N.H.), Entomology, Suppl. 9: 413, 414) was the first author to observe that in this case the first reviser was Warren (1926. Trans. ent. Soc. London, 74 (1): 165), who chose *Sloperia*. The name *Muschampia*, which may well have been used more often in the European literature, might therefore take precedence over *Sloperia* only after a change in priority has been approved by the IUZN, or otherwise only if considered not to by a synonym of *Sloperia*. In contrast, the name *Syrichtus*, that some authors have used to designate this taxon, is a synonym of *Carcharodus* (see note 089.003.0.). The genus *Sloperia* is entirely Palearctic and includes 20 species. What remains to be noted is that the designation of *Papilio proto* Esper, [1831] as the type species of *Sloperia* by Elwes & Edwards (1897. Trans. zool. Soc. Lond., 14 (4): 153) is invalid. See also Hemming (1967) and Hesselbarth *et al.* 1995 (Die Tagfalter der Türkei, 1: 192). See also note 089.003.0.001.1.

089.004.1	*Muschampia* is a subjective synonym of *Sloperia* (see note 089.004.0).
089.004.0.001.0	In contrast with what is often found in the literature, "Esper, 1808" is not the author of this name, which we owe to Ochsenheimer [1808]. Esper's name appeared only in the Supplement to "Der Europaischer Schmetterlinge …", p 123–124, whose publication was delayed until 1831. Esper himself acknowledged Ochsenheimer's precedence by making explicit reference to his work.
089.005.0	The genus *Erynnis* is mainly Holarctic. It includes 7 species in the Palearctic area and 18 or 19 in America, where at least one species ranges as far South as Argentina and Chile (*E. funeralis clericalis* (Burmeister, 1875)).
089.005.1.	Both Hemming (1967: 437) and Bridges (1988: IV.32) have overlooked that Blanchard's (1840. Hist. nat. Ins. 3: 469) selection of *Papilio tages* Linné, 1758 as type species of the genus group name *Thanaos* is invalid, since Boisduval [1834] did not mention *P. tages* among the species originally included in his genus *Thanaos* (Art. 67.2 ICZN). As a consequence, *Thanaos* cannot be considered an objective synonym of *Erynnis*. In the original description of this genus, Boisduval (1840) said that it included four species, of which he mentioned only three, i. e. the European *Papilio marloyi*, together with *N*. American *Papilio juvenalis* Fabricius, 1793 and "Quercus". The latter taxon was apparently never described (a Nomen Nudum) and is generally, although erroneously, attributed to Butler (1870. Entomol. month. Mag., 7 (77): 97) in the American literature (Lamas 2008: http://www.ucl.ac.uk/taxome/gbn/ ; Pelham 2012 http://butterfliesofamerica.com/US-Can-Cat.htm). Another common error is in the statement that Butler, who correctly attributed it to Boisduval, cited "quercus" in the synonymy of *Thanaos martialis*, what he did not do.
089.006.0	The genus *Heteropterus* is monobasic and occurs throughout the temperate Palearctic Region and as far East as Japan. See Gregory (2010. Zoological Bibliography, 1 (1): 6–8), for the date of publication of this name.
089.007.0	The genus *Carterocephalus* is Holarctic. It includes 16 Palearctic species, mostly concentrated in S.W. China, whereas only one, *C. palaemon*, occurs also in North America, where it reaches S. California (see Evans, 1949. A catalogue of the Hesperiidae from Europe, Asia & Australia in the British Museum (N.H.), British Museum (N.H.), 502 pp, 53 Pls). Lederer's paper was published in February 1853.
089.008.0	The genus *Thymelicus* is entirely Palearctic and includes 10 nominal species. *T. lineola* was accidentally introduced into N. America (see Evans, 1949. A catalogue of the Hesperiidae from Europe, Asia & Australia in the British Museum (N.H.), 502 pp, 53 Pls). The date of publication of this name was fixed by the ICZN (Op. 150 & Dir. 4).
089.008.1	*Adopoea* is a junior subjective synonym of *Thymelicus*. This name was sometimes misspelled as "Adopaea"
089.008.002.1	The author of the name *Papilio flava* is Pontoppidan, although this author made reference to a description by Brünnich, probably in litteris. The name was first amended to *Papilio flavus* by Müller (1775 Zoologiae Danicae Prodromus, p. 115, no. 1333).
089.009.0	The genus *Hesperia* is Holarctic. It includes 19 (or 20) N. American species, one of which, *H. nabokovi*, is Caribbean. Only 2 species (*H. comma* and *H. florinda*) occur in the W. and E. Palearctic, respectively.
089.009.1	Apart from this, which was rather broadly used in the scientific literature of the 1800s and early 1900s, a number of other names, variously valid at nomenclatural level, were introduced to denote the genus typified by *Papilio comma* Linné, 1758, before the ICZN issued its Op. 1240. Since these names were scarcely used, we will limit ourselves to list them in this note, while omitting them from the Nomenclature table, for brevity. They are: *Diorthosus* Rafinesque, 1815 Analyse de la Nat., p. 128, no. S.F. 3, G. 7; *Phidias* Rafinesque, 1815 Analyse de la Nat., p. 128, no. S.F. 3, 41; *Steropes* Rafinesque, 1815 Analyse de la Nat., p. 128, no. S.F. 3, 38; *Symmachia* Sodoffsky, 1837 Bull. Soc. imp. Nat Moscou 10 (6): 82.
089.009.2	Tutt (1905) resurrected Linné's (1758 Syst nat, ed. x, p. 484) name *Urbicola* (Papilio. Plebeji, urbicolae) and attributed its typification to Barbut (1781. Les Genres des Insectes de Linné, p. 173). Unfortunately enough, when ICZN (1957) issued its Op. 450, thereby changing Op. 124 and 279 it validated at Subgenus rank all Linné's subdivisions of *Phalaena* (itself suppressed under the Plenary Powers), i.e. *Alucita*, *Bombyx*, *Geometra*, *Noctua*, *Pyralis*, *Tinea* and *Tortrix*, but failed to do the same for many other similarly published names. More in particular, all butterflies described by Linné in 1758 (Syst. Nat., ed x), still fall under the provisions of Op. 124, 279 and are considered to have been published under the Genus *Papilio*, so that none of its Linnean divisions (*Barbarus*, *Eques*, *Heliconius*, *Danaus*, *Nymphalis*, *Plebejus*) are deemed nomenclaturally valid under that author and date. In other words, such names are to be treated as "interpolated names" devoid of any nomenclatural status. The name *Urbicola*, which Linné actually published as a further subdivision of *Plebejus*, has therefore to be attributed to Tutt (1905).

089.010.0	The genus *Ochlodes* is Holarctic, with an extension to C. America (*O. samenta* Dyar, 1914) and the Caribbean area (*O. batesii* (Bell, 1935). It includes 14 nominal species in the Palearctic and only 4 in North America. The name was first published on p. 57 of a circulated "preprint" (released in April 1872) of a paper which later (June 1872) appeared in vol. 4 of the Annual Report of the Peabody Academy of Sciences for 1871 (pp. 24–83). New names date from the preprint.
089.010.1.	Scudder's (1872. 4th annl Rept Peabody Acad. Sci., 1871: 79) typification of this name with *Papilio sylvanus* Esper, [1777] is invalid. See Hemming (1967: 69). The genus *Augiades* is entirely Neotropical and includes only two species (*A. crinisus* and *A. epimedea*: see Lamas, 2004. Atlas of Neotropical Lepidoptera. Checklist: 4A. Scientific Publishers, Gainsville, Florida).
089.010.0.001.0	Normally, the name *Papilio sylvanus* Esper, [1777] would not have been available, since it is a primary homonym of *Papilio sylvanus* Drury (1773. Ill nat. Hist., p. 5, Pl. 3, Figs 2, 3). The ICZN, however, has ruled under the plenary power that in this particular case the principle of homonymy does not make Esper's name invalid (Op. 1944). In the absence of this decision by the ICZN and in case *Ochlodes hyrcanus* (*Hesperia hyrcana* Christoph, 1893. Dt. Ent. Z. Iris, 6: 87, TL: Hyrcania: [=Iran.] Astrabad [=Hadschyabad] and Azerbaijan: [Talysh:] Lenkoran) was subjectively deemed a separate species (see for instance Nazari, 2003. Butterflies of Iran, p. 301–302), the name to designate the European taxon would have been *O. faunus* (Turati, 1905). The date of publication of *Papilio sylvanus* Esper, [1777] is fixed by the publication of Pl. 36, which occurred well before that of the accompanying text [1779] (see also 1 (1), index, p. xix, no. 209).
089.010.0.001.1	Evans (1949. A catalogue of the Hesperiidae from Europe, Asia & Australia, p. 351–352) was the first author to observe that taxa often collectively referred to *Ochlodes venatus* (*Hesperia venata* Bremer & Grey, 1853) form two separate groups having different genitalia. *O. venatus* may be subjectively deemed conspecific with, or otherwise separate from, *Augiades similis* Leech (1893. Butts China Japan & Corea: 605, pl. 41, fig. 6. LT: China: Sichuan; Mupin [=Baoxing Xian]).
089.011.0	The genus *Gegenes* includes only 5 African species, 3 of which enter the Palearctic. Of these, *G. gambica*, which is separated from *G. pumilio* mainly by its chromosome number, is only marginally present in the S.E. Mediterranean. The date of publication of *Gegenes* was fixed by ICZN (Op. 150 & Dir. 4).
089.011.0.001.0	Dimorphic females of *Gegenes pumilio* have been often misidentified as *G. nostrodamus*, to which they are superficially similar. Accordingly, the Italian distribution of this species remains rather little understood. The pre-imaginal instars of Italian *G. nostrodamus* have been described by Villa & Righini (2004. Linn. belg., 19 (6): 259–267).
089.011.0.002.0	Hubert de Lesse (1960. Ann. Sci. nat. Zool., (12) 2 (1): 27) and Torben Larsen (1982. Nota Lepid. 5 (2–3): 103–110) have shown that specimens from the W. Mediterranean (Montecarlo and Algiers) have a haploid chromosome complement of N=24, while those from Beirut and Yemen have N=41. Larsen, accordingly, has proposed that the name *Gegenes gambica* (*Pamphilia gambica* Mabille, 1878. Petites Nouv. entomol., 2 (197): 233; LT: "Senegambia") is used to designate the latter taxon. The karyotype of specimens from S. Italy (i.e. Campania, Type Locality of *G. pumilio*), however, is unknown.
089.011.0.002.1	Cyrillio's name *Papilio pygmaeus* is a misidentification, not a junior primary homonym of *Papilio pygmaeus* Fabricius, 1775 (a S. Asiatic species currently classified under *Aeromachus* Nicéville), since Cyrillo refers explicitly to Fabricius. Therefore, Hoffmansegg did not propose a "replacement name" (see definition of that term in the Glossary of the ICZN Code) for "*P. pygmaeus* Cyrillo, 1787" or [*P.*] *pygmaeus* Hübner [1803], but an entirely new species-group name based on the illustrations and description given by Cyrillo and by Hübner for what they believed was *P. pygmaeus* Fabricius.
089.012.0	Authors are still in disagreement as to the limits of the genus *Papilio*. Some species groups, in fact, are subjectively considered either as subgenera or as separate Genera, depending on cases. The subgenus *Papilio*, (or *Papilio* s. str.), represents a Holarctic complex and includes 4 species in the Palearctic Region (*P. machaon*, Holarctic, *P. saharae*, *P. hippocrates*, *P. hospiton*) and 4 exclusively Nearctic (*P. zelicaon*, *P. polyxenes, P. brevicauda*, *P. indra*), apart from *P. polyxenes* which ranges to the Neotropical region as far as North Peru (*P. polyxenes gerardi* Bollino & Vitale, 2002). (See Munroe, 1961. Canad. Entomologist, (Suppl. 17): 1–51; Hancok, 1983. Smithersia 2: 1–48; Caterino *et al.*, 1999. Mol. Phyl. Evol., 11 (1): 122–137. Zakharov *et al.*, 2004. Syst. Biol., 53 (2): 193–215; Inoue, 2006. Zool. Sci., 53 (2): 193–215. Tyler *et al.*, 1994. Swallowtail Buttefflies of the Americas. A study in biological dynamics, ecological diversity, biosystematics and conservation. 376 pp. Scientific Publishers Inc., Gainesville).

089.012.0.001.0	*Papilio alexanor* is threatened in Europe, where it is rigorously protected (included in Annex 4 of the Habitats Directive). In Italy and adjoining S.E. France, it occurs at a highly restricted number of sites of the S.W. Alps. Some captures have been reported from Calabria between 1918 and 1927, while an additional one occurred at Morano Calabro (Cosenza) on 03-06-1985, when Prof. Gino Gulli (Catania) observed and captured one female while she was ovipositing on *Ferula communis*. Only two observations occurred in Sicily (1927, 1972; see Henriksen 1981. Boll. Soc. ent. Ital, 113: 51). Such specimens, however, are probably rare migrants originating from the Balkans, since, despite much research, no stable population was ever discovered to exist in S. Italy. Verity (1947. Farfalle diurne d'Italia, 3: 34) classified this species in the genus *Pterourus* Scopoli, 1777 (Introd. Hist. nat., p. 433. Type species *Papilio troilus* Linné, 1758. Syst. Nat. (ed. X), p. 459, no. 5 "habitat in Indiis"). By selection by Scudder, 1872 (4th annl Rept Peabody Acad. Sci., 1871: 18, 29). Molecular studies by Caterino *et al.* (1999. Mol. Phyl. Evol., 11 (1): 122–137) are not incompatible with this point of view, but most systematists consider this placement untenable. The taxonomic position of *Papilio alexanor*, however, is controversial and some authors have suggested that it ought to be classified in a separate genus or subgenus (see Zakharov *et al.*, 2004. Syst. Biol., 53 (2): 193–215). Apart from the French S.E. and Italian S.W. Alps, *Papilio alexanor* ranges from the Balkans to the W. Tien Shan, with a broadly disjunct distribution. See Heppner (1981) for the date of publication of this name.
089.012.0.001.1	For the time being, we will limit ourselves to note that the name *Papilio polidamas* de Prunner, 1798 would have nomenclatural priority over *Papilio alexanor* Esper, [1800]. To promote nomenclatural stability, someone may decide to submit an application to ICZN asking that de Prunner's name is suppressed under the plenary powers, together with the name *Papilio bramafama* de Prunner, 1798 (a senior synonym of *Polyommatus eros*). It is to be noted, however, that both these names fall under the provision of Art. 23.9 and represent "nomina oblita". They should, therefore, be overlooked.
089.012.0.002.0	*Papilio hospiton* is considered threatened by the international legislation. It is included in the Annexes II and IV of the Habitats Directive, which forbid "all forms of deliberate capture or killing of specimens … in the wild", as well as "the keeping, transport and sale or exchange, and offering for sale or exchange, of specimens taken from the wild, except for those taken legally before this Directive was implemented". All international commerce of this species is also forbidden by the Washington Convention (CITES Appendix 1). In Italy *Papilio hospiton* occurs only in Sardinia.
089.013.0	The genus *Iphiclides* is entirely Palearctic. Apart from *I. podalirius*, it includes *I. feisthameli* (often jubjectively considered a "subspecies"of the former) and *I. podalirinus*, confined to S.W. China and E Tibet (see Racheli & Cotton, 2009. In Bozano (Ed.), Guide to the Butterflies of the Palearctic Region, Papilionidae, pt. 1, Omnes Artes, 69 pp.). The date of publication has been fixed by the ICZN (Op. 150 & Dir. 4).
089.013.0.001.1	Given the ambiguousness of Linné's type locality, some authors had thought that the name *Papilio podalirius* could be used to identify the N.W. African populations currently referred to *I.* "*podalirius*" *feisthamelii* and used Poda's name to designate European and Asiatic populations. The matter was settled by ICZN with Op. 150 (Dir. 4), by designating "Livorno" as type locality of *I. podalirius.*
089.014.0	The genus *Parnassius* is Holarctic. Most authors agree that 3 (or maybe only 2) species occur in N. America, apart from *P. "phoebus"* and *P. eversmanni*, which reaches Alaska from N.E. Asia. The Palearctic species are considered 48–50, depending on the authors, and are often subdivided in about 5 subgenera (see Omoto *et al.*, 2004. Gene, 326: 141–147; Takoh *et al.*, 2005. Zool. Sci., 53 (2): 193–215).
089.014.0.001.0	The entomological literature is ridden with an unbelievable number of publications, many of them dealing with some "new" Italian "subspecies "of *Parnassius apollo*. Each of these "subspecies" may well be superficially recognizable from any other, but intermediate specimens are common. Molecular analyses carried out so far have failed to demonstrate any relevant genetic difference between even the most morphologically distinct of these "subspecies" (see Racheli *et al.*, 1986. Atti XIII Congresso nazionale italiano di Entomologia. Torino, Italy: Sestriere, 491–498 and Todisco *et al.*, 2010. Biol. J Linn. Soc., 101: 169–183). Accordingly, none of the "subspecies" of *P. apollo* will be referred to in this paper. *Parnassius apollo* is threatened in Europe and is included in the Annex IV of the Habitats Directive, which forbids "all forms of deliberate capture or killing of specimens … in the wild", as well as "the keeping, transport and sale or exchange, and offering for sale or exchange, of specimens taken from the wild, except for those taken legally before this Directive was implemented". The international commerce of this species is also restricted by the Washington Convention (CITES Appendix 2 and C1 EU). This species is not apparently threatened in the Italian Alps, but some peninsular populations have become extinct in recent times, while other populations occurring in the Apennines and in Sicily are declining.

089.014.0.002.0	Results from of a comparative analysis of microsatellites' distribution among populations have been described by Gratton *et al.* (2008. Molec. Ecol., 17: 4248–4262), while Gratton *et al.* (2009. Conserv. Genet., 10: 1141–1143) have developed for the first time the primers to amplify DNA from several mictrosatellite loci of *P. mnemosyne*. *Parnassius mnemosyne* is threatened in Europe and is included in the Annex IV of the Habitats Directive, which forbid "all forms of deliberate capture or killing of specimens … in the wild", as well as "the keeping, transport and sale or exchange, and offering for sale or exchange, of specimens taken from the wild, except for those taken legally before this Directive was implemented". *P. mnemosyne* is not globally threatened in Italy, although in the Apennines some populations are declining and others have become extinct in recent years.
089.014.0.003.0	Even though the name *P. phoebus* (Fabricius, 1793) was used to identify this species for a very long time, we cannot anymore use it for the taxon occurring in the Alps. Rather unfortunately it is now clear that Fabricius' name has been used to designate the wrong species. As Hanus & Thiver (2010. Int. ent. Ver. Apollo, NF 31 (1/2): 71–84) have observed, Fabricius made unequivocal reference (i.e. "Papilio Phoebus Jon. fig. pict. 2. tab. 2. Fig. 2") to the watercolours painted by William Jones and depicting a butterfly in Drury's collection. This picture, by definition, is a representation of the Holotype (or 2 Syntypes?) of *P. phoebus*. Jones' aquarelles, however, do not depict the species known so far as *P. phoebus*, but represents a specimen of what was normally known as *P. ariadne* Lederer, 1853 (Verh. zool.-bot. Ver. Wien 3 : 354 TL: Altai). The latter species ("*P. ariadne*"), as a consequence, should now be named *P. phoebus*, while the taxon known as *P. phoebus* becomes *P. corybas* Fischer de Waldheim, [1824] (Entomographia Imperii Russici, 2: 242, Pl. 6, Fig 2 TL: Kamchatka). Some authors have also contended that European larvae are morphologically distinct, occur in different habitats and on different larval foodplants with respect to those ranging in Siberia (Altai, etc) and boreal N. America, from which they are also broadly separated geographically (see Nardelli, 1991. Int. ent, Ver. Apollo, N.F. 12 (2): 141–152; Häuser, 1993. Tijdschr. Ent., 136: 137–146; Shepard & Manley, 1998. In Emmel (ed.), Systematics of western North American butterflies, pp. 717–726. Mariposa Press, Gainesville FL; Häuser *et al.*, 2005). As a consequence some authors have argued that the Alpine taxon should now be named *P. sacerdos* (see Catalogue of Life and Häuser *et al.* 2005). Molecular data by Todisco *et al.* (2012. J. Biogeogr., 39 (6): 1058–1072), however, did not support this interpretation, particularly as concerns Asiatic "*P. phoebus*". The nomenclatural mess deriving from all this may finally be untangled by a decision by the ICZN, to which we have submitted an application asking that the name *Papilio phoebus* Fabricius, 1793 is suppressed under the plenary powers (Balletto & Bonelli, 2014. Bull. zool. Nom., Case 3637). This action would concomitantly validate the name *Papilio phoebus* de Prunner (1798: 69, no. 135, LT: [Italy: Piemonte:] Val Varaita: Monte Verz), which would become available to designate this species once again, although with a different authorship, date and type locality.
089.014.0.003.2	In the above cited application to ICZN we have clearly shown that the name *Papilio phoebus* de Prunner, 1798 is a junior primary homonym and not a misidentification of *Papilio phoebus* Fabricius, 1793. *P. phoebus* de Prunner was figured for the first time by de Loche (1801. Mem. R. Accad. Sci. Torino,vol. 6, Pl. 6, Figs 2, 3).
089.014.0.003.3	See Heppner (1981) for the date of publication of Esper's name.
089.014.0.003.3	"Parnassius gazeli" was cited from current Italian territory only once, by G. Bernardi (1967. Lambillionea, 66 (9/10): 71–74), as occurring at S. Giacomo di Entracque (Cuneo), but despite much research it was never found again in the same area. Even though several authors have contended that it might represent a separate species, Michel *et al.* (2008. Anns Soc. ent. Fr., 44 (1): 1–36) have failed to find any molecular difference with respect to *P. sacerdos*.
089.015.0	The genus *Zerynthia* is confined to the W. Palearctic Region. The subgenus *Zerynthia* includes only 3 species, all Mediterranean; the other 4 species are classified in subgenus *Allancastria* (see Nazari *et al.*, 2007. Mol. Phyl. Evol., 53 (2): 193–215).

089.015.0.001.0	This name is sometimes wrongly credited to Schulz (1776. Der Naturforscher, 9: 221), who very correctly made reference to Fabricius' work (see also ICZN Op. 1134). *Zerynthia polyxena* is threatened in Europe and is included in the Annex IV of the Habitats Directive, which forbids "all forms of deliberate capture or killing of specimens … in the wild", as well as "the keeping, transport and sale or exchange, and offering for sale or exchange, of specimens taken from the wild, except for those taken legally before this Directive was implemented". Another species in this subgenus, *Z. rumina* Linné, 1758 (Syst. Nat. (ed. X), p. 480, no. 132 "habitat in Europa australis") was listed by Staudinger (1901. In Staudinger & Rebel, Cat. Lep. Palaerkt. Faunengeb., 1: 4, no. 11) as occurring in "Gal. m. [= Gallia meridionalis]; It s." [= Italia septentrionalis]. No Italian record of this species, either old or recent, is known to support this claim. One should keep in mind, however, that Nice, together with the Savoy and much of what is now the Département des Alpes Maritimes, has become stable part of French territory only in 1860 (Agreements of Plombières: 1858 and treaty of Turin 1860). See also note 089.001.0.007.0
089.015.0.002.0	Dapporto (2010. J Zool. Syst. Evol. Res., 48 (3): 229–237) has shown that *Zerynthia cassandra* from peninsular Italy has quite distinct genitalia with respect to *Z. polyxena* from mainland Europe (comprised S. France) the pre-alps, the N.W. Ligurian Apennine and the Padano plains. Molecular data obtained by Zinetti *et al.* (2013. PLOS One, 8 (6): e65746. doi:10.1371/journal.pone.0065746) concur in demonstrating species rank differentiation between these taxa, which may hybridise only at very low rates and in very narrow contact areas.
089.015.0.002.2	See Hemming (1934. Stylops, 3 (9): 197) for a discussion on the nomenclature and the type localities associated with this and the preceding two names.
089.016.0	The genus *Aporia* includes only one European species and as many as 32 Asiatic species, showing a strong concentration in S.W. China and E. Tibet (see Della Bruna *et al.*, 2004. In Bozano (Ed.), Guide to the Butterflies of the Palearctic Region, Pieridae, pt. 1, Omnes Artes, 86 pp.; see also Braby *et al.*, 2007. Biol. J. Linn. Soc., 90: 413–440 for an analysis of the phylogenetic position of this group). The date of publication of *Aporia* was fixed by ICZN (Op. 150 & Dir. 4).
089.017.0	The genus *Pieris* is Holarctic and is sometimes subdivided into 3 subgenera (*Pieris* and *Artogeia* having 4 radial veins and *Pontia* with 3 radial veins see Klots 1933. Ent. amer., (n.s.), 12 (3): 139–242). The subgenus *Pieris*, with 7 species, is almost entirely Palearctic, with the only exception of *P. rapae*, which is currently cosmopolitan and of *P. brassicoides*, from the Ethiopian and Kenyan mountains. The classification of the pierids was discussed by Braby *et al.* (2007. Zool. J. Linn. Soc., 147: 239–275).
089.017.1	*Artogeia* is generally considered part of a single genus *Pieris* but was sometimes classified as a separate subgenus or even as a distinct genus. Taxonomically, the *Artogeia* species group, whatever the rank, represents an extremely complicated group of taxa, which, along with evolution, came to form several semi-species complexes and many intermediate populations of more or less recent hybrid origins. Five species of this group exist in North America, while as many as about 20–25 occur in the Palearctic Region. In Italy this complex includes *Pieris napi*, *P. bryoniae* and *P. ergane*, but probably not *P. mannii*, which is molecularly part of *Pieris* sensu stricto (Cervella & Balletto, unpublished results). As concerns nomenclature, it is to be recalled that the genus group names published by Fabricius, 1807 (in Mag. f. Insektenk. (Illiger), 6: 277–295) take precedence over those published by Hübner [1807] in "Samml. exot. Schmett." (Dir. 4 ICZN).
089.017.2	On the basis of differences in venation and of some unpublished DNA evidence (N. Wahlberg) *Pontia* may subjectively be considered a separate genus from *Pieris*. The name *Pontia* Fabricius, 1807, was a junior homonym of *Pontia* [Illiger], 1807 (Allgem. Lit. Ztg., Halle (Jena), 1807 (2): 1180), until the ICZN suppressed Illiger's name under the plenary power, for the purposes of both the Principle of Priority and the Principle of Homonymy. (Op. 232). *Pontia* can be subjectively considered either a subgenus of *Pieris*, or a separate genus (within which some authors are recognising *Synchloe* as yet another subgenus: see Chew & Watt, 2006. Biol. J. Linn. Soc., 88: 413–435). *Pontia* has a Holarctic distribution and includes at least 5 Palearctic species. North American species of *Pontia* are 3. In Italy *Pontia* includes *P. callidice*, *P. daplidice* and *P. edusa*. Some authors variously classify either under *Pontia* or under *Synchloe*, also the 6–8 taxa of the Asiatic complex of *Pieris dubernardi*, even though this may make *Pontia* paraphyletic. The latter taxa have been otherwise classified under *Sinopieris* Huang, 1955 (Bull. amat. Ent. Soc., 54 (399): 54. TS: *Sinopieris gongaensis* Huang, 1955. Bull. amat. Ent. Soc., 54 (399): 56, Fig. 1b).
089.017.3	*Synchloe* is generally regarded as a subjective synonym of *Pontia*, sometimes as a separate subgenus, more rarely as a distinct genus.

089.017.4	The rejection of Hübner's "Tentamen" for nomenclatural purposes (Op. 97), has made invalid a number of potential genus-group names such as, among the "nymphales": "Nereis" (*polymnia*), "Linmas" (*chrysippus*), "Lemonias" (*maturna*), "Dryas" (*paphia*), "Hamadryas" (*jo* [sic!]), "Potamis" (*iris*) and "Oreas" (*proserpina*), or among the "gentiles" "Rusticus" (*argus*), "Princeps" (*machaon*), "Mancipium" (*brassicae*), "Consul" (*fabius*) and "Urbanus" (*malvae*). Before Op. 97 was rendered, several of these names had entered the scientific literature.
089.017.0.002.0	Hübner published the name of [*Papilio*] *bryoniae* for the first time in [1793] (Der Schmetterlinge Lepidoptera Linnei, p. 9). Since this publication has been made unavailable for nomenclatural purposes (Op. 975), the date of valid publication has shifted to [1806], when Hübner published this name in a footnote concerning *Papilio napi*, on p. 62 of the very incomplete text (1805–1806) accompanying the "Papiliones" part of his Sammlung. In this note the author gives a very short description of what he seems to consider a female variety of *P. napi*, together with a reference to his Pl. 81, which had appeared already in the year 1800. In this plate, the caption of fig. 407 is [*Papilio*] *napi*. The same reference (4. Repsfalter *Papilio napi* Pap. 406 Mas; 407 Foem.) appears in the text (1806). Nine lines further down, however, the author refers again to "Pap. 407", this time as depicting "*bryoniae*". The Type Locality "Deutschland" is only mentioned under the description of *Papilio napi*, and we report it here also for "*bryoniae*", by implication.
089.017.0.003.0	The ICZN has ruled (Op. 276) that for species group names published by Hübner, 1806–[1823] in "Sammlung exotischer Schmetterlinge" vol. 1, the middle term of apparent trinominals included in the first volume is not to be treated as having acquired the status of a subgeneric name, by reason of having been so published. Op. 137 (& Dir. 4 ICZN) have also ruled that the genus-group names published in the legends to plates in Volume 1 of this work are not to take precedence over any names for the same genera published later on by Fabricius (1807. Mag. f. Insektenk. (Illiger) 6: 277–295).
089.017.0.004.0	Geiger & Scholl (1982. Mitt. Schweiz. ent. Ges. 55) have demonstrated that the taxon formerly known as "*P. daplidice*" actually represents a group of 2 separate species. Wagener (1988. Nota lepid., 11 (1): 21–39) has defined the currently used names. The narrow N. Italian hybrid belt occurring between these 2 taxa has been studied by Porter *et al.* (1997. Evolution, 51 (5): 1561–1573). The species-level separation of *P. edusa* has been confirmed also by DNA-based studies (Wiemers at al, 2013. Entomologist's Gaz., 64: 69–78.).
089.017.0.006.0	Unpublished results by P. Cervella & E. Balletto on pierid mitochondrial DNA (cyt-b) have shown that *P. ergane* is part of the clade which includes also *P. napi* and *P. bryoniae*, and not of the clade containing *P. brassicae*, *P. rapae* and *P. mannii*, as it was generally expected.
089.017.0.007.0	The complete title of the journal where the original description of *P. mannii* was published is: "Entomologische Zeitung, Herausgegeben von dem entomologischen Vereine zu Stettin". For uniformity, we have listed the abbreviation adopted in Vol. 3 of "Serial publications in the British Museum (Natural History)" (3rd Edn, 1980). This abbreviation makes reference to the original name of this journal (Stettiner entomologische Zeitung, Stettin).
089.017.0.008.0	The *Pieris napi-P. bryoniae* complex has long been seen as an evolutionary riddle by many biologists and taxonomists alike and it is on this model-system on which Lorković (1953. Biol. glanisk., 7: 236–237) founded the semispecies concept. Patterns of local limitations to gene-flow between populations of these taxa were investigated by Porter & Geiger (1995. Biol. J. Linn. Soc., 54: 329–348) and Porter (1997. Ecol. Ent., 22: 189–196).
089.017.0.008.1	Unpublished results by P. Cervella & E. Balletto on pierid mitochondrial DNA (cyt-b) have shown that the once so-called *P. flavescens* shares with *P. napi* identical mitochondrial DNA (cyt-b). It seems likely, therefore, that the former represents the stabilized hybrid between female *P. napi* and male *P. bryoniae*, which is occurring in the absence of one or the other of the 2 parent taxa. The opposite hybrid *P. napi* (♂) and *P. bryoniae* (♀) might be what is known as *P.* [*napi*] *napaeae*, but no direct evidence for the latter hypothesis is available.
089.017.0.009.0	*Pieris rapae* has become a cosmopolitan species, which spread to all continents and as far as New Zealand, together with crops.
089.018.0	The genus *Euchloe* is Holarctic. It includes 6 fully North American species, and another, *E. naina*, which extends to Arctic N. America, perhaps originating from Yakutia. The Palearctic species are 12–13, excluding those classified in other subgenera. See Suarez *et al.* (2009. Mol. Phyl. Evol., 51: 601–605) for information on *Euchloe* phylogeny. The date of publication of *Euchloe* has been fixed by ICZN in Op. 150 (Dir. 4). Some, even recent, authors have written this name as "Euchloë", following Hübner's original spelling. It is to be recalled, however, that ICZN, states that no diacritic or other marks (dieresis, apostrophes, or ligature of the letters "*a"* and "*e*" (*æ*), or "*o*" and "*e*" (*œ*) etc.), is to be used in scientific names (Art. 27 and Art. 32.5 ICZN). The use of hyphens (as in c-album) is disciplined by Art. 32.5.2.4.3.

089.018.0.001.0	*Euchloe ausonia*, *E. crameri*, *E. Insularis* ed *E. simplonia* have been separated at species level mainly on the basis of their larval morphologies (see Strobino, 1976. Entomops, 38: 203–210; Back, 1990. Atlanta, 21 (3/4): 187–206). See also Casini (1996. Linn. belg., 15 (7): 275–280) and Jutzeler *et al.* (1998. Linn. belg., 16 (6): 227–234) for descriptions of Italian larvae.
089.018.0.002.0	The larval development of Italian *Euchloe tagis* has been described by Jutzeler (2003. Bull. Soc. ent. Mulhouse, pp. 45–48).
089.018.0.002.1	The larval development of "ssp. calvensis" has been described by Casini (1996. Linn. belg., 15 (7): 275–280 and 2001,18 (2): 75–86).
089.018.0.003.0	*Euchloe ausonia*, *E. crameri*, *E. insularis* and *E. simplonia* have been separated mainly on the basis of their larval morphologies (see Strobino, 1976. Entomops, 38: 203–210; Back, 1990. Atalanta, 21 (3/4): 187–206). The larval development of Italian *E. crameri* is described by Jutzeler (1993. Bull. Soc. ent. Mulhouse, pp. 63–66). *E. ausonia* and *E. crameri* may form a hybrid area in the S. Padano plains.
089.018.0.004.0	Pre-imaginal instars have been described by Strobino (1976. Entomops, 38: 203–210) and by Jutzeler *et al.* (1996. Linn. belg., 15 (6): 214–218).
089.018.0.005.0	Judging by analogy with the action taken by ICZN as regards species described by Freyer in "Neuere Beiträge der Schmetterlingskunde", it would seem logical to suppose that, also in this case, names interpolated between the genus name *Papilio* and the species name are to be considered devoid of nomenclatural validity. No such action has been taken by the ICZN, however, as concerns the "Beiträge". *Euchloe ausonia*, *E. crameri*, *E. insularis* have been separated mainly on the basis of their larval morphologies (see Strobino, 1976. Entomops, 38: 203–210; Back, 1990. Atalanta, 21 (3/4): 187–206). Some authors refer *Euchloe simplonia* to Boisduval's (1828) authorship, apparently in error.
089.019.0	The genus *Anthocharis*, often subdivided into 2 subgenera (*Anthocharis* and *Paramidea*), is Holarctic. The subgenus *Anthocharis* includes 6 Palearctic species (plus one which extends to tropical China), and 2 North American species. The subgenus *Paramidea* (non European), includes 2 Asiatic and 3 North American species.
089.019.0.001.0	The larval development of Italian *A. cardamines* has been described by Casini (1996. Linn. belg., 15 (7): 275–280).
089.019.0.002.0	The Italian range of *A. damone* is confined to N.E. Sicily and Calabria. Preimaginal instars of an Italian population have been described by Jutzeler *et al.* (1998. Linn. belg., 16 (6): 227–234).
089.020.0	The genus *Colias* has very broad distribution all over the temperate and mountainous areas of the World and as far off from the Palaearctic as southern South America and South Africa. It is absent only from S. and S.E. Asia, as well as from Oceania. Within the Palearctic Region, it includes about 54 species (see Grieshuber *et al.*, 2012. The genus *Colias* Fabricius, 1807 Jan Haugum's annotated catalogue of the Old World *Colias*. 428 pp, 32 Pls.Tschikolovets Publs, Pardubice); those exclusively North American are 14 (4, generally circumpolar, are in common between the Old and the New World); the South American species are at least 9 and occur mainly on the Andes, while only one species (*C. electo*) is found in temperate sub-Saharan Africa and in S. Arabia. Finally, one species, *Colias ponteni*, originally described from "Hawaii" may have been collected in Tierra del Fuego (see Verhulst, 2000. Les *Colias* du Globe., 1 (texte): 262 pp; 2 (planches): 183 Pls; pp. 273–308). See Brunton, 1998 (Heredity, 80: 611–616; Wheat & Watt, 2008. Mol. Phyl. Evol., 47: 893–902) for a phylogeny. See note 089.017.1, as concerns some nomenclatural issues.
089.020.0.001.0	After Op. 1657 was published, some Russian authors (see for instance Tuzov, 1997. Guide to the Butterflies of Russia..., 1: 172) have observed that the names *Colias hyale sareptensis* Alphéraky, 1875; *Colias hyale alba* Rühl, 1893 and *Colias hyale meridionalis* Krulikowsky, 1903 would have nomenclatural precedence over *Colias hyale alfacariensis* Ribbe, 1905. The ICZN, as a consequence, and for the sake of nomenclatural stability, expressed Op. 2180, stating that Ribbe's name takes priority over all these other names, when considered to represent conspecific taxa.
089.020.0.002.0	The name *Papilio croceus* is sometimes attributed to Geoffroy, in [de] Fourcroy, 1785. De Fourcroy, however, only reported in full the description previously published by Geoffroy, (1764. Hist. abrégée des Insectes …Paris, 2: 75, no. 48), in which Geoffroy provided for, this species only the vernacular name "Le souci". Geoffroy is not listed as a co-author in Fourcroy's "Entomologia parisiensis", where the name was for the first time fully latinized, and where Geoffroy was only given credit for his method ("catalogus… secundum methodum Geoffreanum … distributus". See also Fourcroy's introductory "Monitum").
089.020.0.003.0	The Italian distribution of *Colias hyale* is restricted to the Padano-Venetian plains.
089.020.0.004.0	The Italian distribution of *Colias palaeno* is confined to the *Vaccinium* and *Rhododendron* scrubs occurring above the tree line, in the Alps.

089.021.0	The genus *Gonepteryx* is entirely Palearctic (apart from *G. burmensis*, which lives in the Burmese transitional area), and includes about 14 species (see Nekrutenko, 1965. Naukova Dumka, Kiev, 165 pp; Kudrna O., 1975. Entomologist's Gaz., 26: 1–37; Brunton & Hurst, 1998. Biol. J. Linn. Soc., 63: 69–79).
089.021.1.	The genus group name *Rhodocera* is invalid, having been published as an unnecessary substitution of *Gonepteryx*. Before this was realised, *Rhodocera* was typified by Blanchard (1840. Hist. nat. Ins., 3: 431), with *Papilio rhamni* Linné (1758. Syst. Nat ed. x, 1: 470. Cited by Boisduval & Le Conte on p. 72).
089.022.0	Scudder (1875. Proc. amer. Acad. Arts Sci., Boston, 10: 204, no. 612) misspelled this name as "Leptidia" and was followed in this by several authors. The genus *Leptidea*, entirely Palearctic, includes 8 species; those entering the European continent are 5.
089.022.0.001.0	*Leptidea duponcheli* (*Leucophasia duponcheli* Staudinger, 1871. In Staudinger & Woche: Cat. Lep. europ. Faunengeb., 1: 5, no. 55 "Gal. me; Ped; Bith; Pont." Replacement name for *Papilio lathyri* Duponchel, 1832-Hist. nat. Lépid. Pap., Suppl. 1: 274, 325, Pl. 43, Figs 3, 4 "[France:] Languedoc", primary homonym of *Papilio lathyri* Hübner, [1823], Pl. 160, Figs 797, 798), was reported by Verity (1947 Farfalle diurne d'Italia, 3: 118) from Pigna (IM), and listed by Staudinger himself for "Ped." (= Piemonte). It was never found again on current Italian territory, however, irrespectively of much active research.
089.022.0.002.0	This species was known for some time as *Leptidea reali* Reissinger, 1990 which was later demonstrated to represent a separate species. The occurrence in Italy of *L. juvernica*, however is, for the moment, based on a small number of specimens from the E. Alps (i.e. Val di Tovo, Laghi. Dincă *et al.*, 2013 J. evol. Biol., 26 (10): 2095–2106, and supplementary information). The "non *L. sinapis*" populations of C. Italy, in fact, have been demonstrated to represent *L. reali*, but no molecular data are available, as yet, as concerns the about 25 N. Italian "populations" known so far. *L. juvernica*, however, is known to occur in Slovenia and S.E. France, in both cases at short distances from "*non L. sinapis*" populations on the N. Italian side of the border (Dincă *et al.*, 2011. Nature Communications, 2: 324–332 (pdf), The occurrence in Italy of "non *L. sinapis*" populations was reported for the first time by Kristal & Nässig (1996. Nachr. ent. Ver. Apollo, 16 (4): 345–361). Since they can be reliably separated from *L. sinapis* only by the examination of genitalia and/or by DNA characters, is not unlikely that the name of this species will have to change (see Verovnik & Glogovcan, 2008. Eur. J. Entomol. 104: 667–674; Friberg *et al.*, 2008. Evol Ecol., 22: 1–18). Notwithstanding their strong morphological uniformity, *L. sinapis*, *L. reali* and *L. juvernica* have shown reciprocal reproductive isolation in courtship experiments, as well as ecological divergence (Dincă *et al.*, 2013 J. evol. Biol., 26 (10): 2095–2106).
089.022.0.003.0	*Leptidea reali* is widespread in C. Italy (Dincă *et al.*, 2011. Nature Communications, 2: 324–332.
089.023.0	The monobasic genus *Hamearis* is a European endemic. The date of its publication was fixed by ICZN with Op. 150 (Dir. 4).
089.024.0	The genus *Lycaena* has been subdivided into a series of sections, either considered as synonyms, or subgenera, or even fully distinct genera, depending on the authors. As concerns the Italian (and the European) fauna, only one species, namely the Holarctic *L. phlaeas*, is a member of the subgenus *Lycaena*. Two more species of this subgenus occur only in China and 1 in Afghanistan (see Bozano & Weidenhoffer, 2001. In Bozano (Ed.), Guide to the Butterflies of the Palearctic Region, Lycaenidae, pt. 1, Omnes Artes, 62 pp.). The genus *Lycaena*, with all its subgenera, is only absent from S. America and includes a total of 60 Palearctic species, while 16 are Nearctic and 3 occur in the Australian Region, including New Zealand. As concerns its nomenclature, it is well known among lepidopterists that this name was misapplied for a long time, since many authors, beginning with Heydenreich (1851. Lep. eur. Catalogus methodicus, p. 12, no. 19) and under Staudinger's authority (1861. In Staudinger & Wocke Catalogue der Lepidopteren Europa's, Dresden, p. 4, no. 16), overlooked Curtis' selection of the type species and used the name *Lycaena* to designate the Palearctic "blues".
089.024.1	Apart from the 3 Italian species (*L. subalpina*, *L. tityrus* and *L. virgaureae*), the subgenus *Heodes* includes only 2 additional species, all Palearctic.
089.024.3	The subgenus *Helleia* includes 5 Chinese and only one European species (*L. helle*), which is apparently extinct in Italy (see also note 089.001.0.007.0 and note 089.024.0.011.0).
089.024.5	The subgenus *Thersamolycaena* includes only 2 Italian species (*L. alciphron*, *L. dispar*), and a total of 8 additional species, all from within the Palearctic area.
089.024.7	The subgenus *Thersamonia* includes only one Italian species (*L. thersamon*), and an additional group of 11 Palearctic species.

089.024.8	The subgenus *Palaeochrysophanus* includes 3 Italian taxa (*L. hippothoe*, *L. xeonophon* (=*eurydame*) and *L. italica*) often considered at "subspecies" rank by other authors. The genus-group name *Palaeochrysophanus* was first published in 1934 (Verity, Entomologist's Rec. J. Var., (5) Suppl.: 13). This publication, however, is invalid under provisions of Articles 13.1.1 and 13.1.2 of the ICZN, which state that after 1930 the publication of genus-group names should include a description or a definition. See note 089.017.1 for other nomenclatural issues.
089.024.0.002.0	According to Lai & Pullin (2004, J Insect Conserv 8: 27–35.) the *Lycaena dispar* population sampled from Italy (Po Valley) may be genetically divergent from other European populations. *L. dispar* is considered threatened in Europe and is included in Annexes II and IV of the Habitats Directive, which forbid "all forms of deliberate capture or killing of specimens … in the wild", as well as "the keeping, transport and sale or exchange, and offering for sale or exchange, of specimens taken from the wild, except for those taken legally before this Directive was implemented".
089.024.0.003.0	The long neglected name *Papilio xenophon* de Loche, 1801 cannot be reinstated as the most senior available synonym to identify the taxon occurring in the Alps", since it represents a 'nomen oblitum' under provisions of Art. 23.9.1.1 ICZN" (used less than 25 times since 1899).. If not subjectively deemed a full species, it may be seen as an allopatric, high elevation, "subspecies" of *Lycaena hippothoe*, which is the taxon occurring in the European low altitudes and plains.
089.024.0.003.1	The name *Papilio euridice* Hübner, [1800] is primary homonym of *Papilio euridice* Borkhausen, 1788 (Naturgeschichte der europäischen Schmetterlinge, 1: 143, no. 3; 270, no. 3, currently *Lycaena virgaureae*) and of *P. euridice* Rottemburg, 1775 (Der Naturforscher, 6: 28, no. 16; currently *Lycaena hippothoe*), as well as, under Art. 58.2 ICZN of *P. eurydice* Linné, 1763 (Amoenitates academicae, 6: 406, no. 65 "habitat in Philadelphia", currently *Lethe eurydice* or *Satyrodes eurydice*).
089.024.0.004.0	In Italy, *Lycaena hippothoe* (s. str., sometimes misspelled as "hippothoë") occurs only in Friuli (Friaul). All ancient citations from the Piedmont's plains (Giorna 1791. Calendario entomologico, p. 57; Rocci 1911. Atti Soc. ligustica Sci. nat. geogr., 22: 153–221) refer to currently extinct populations.
089.024.0.005.0	Subjectively an allopatric "subspecies" of *Lycaena hippothoe*, *L. italica* occupies the high mountains of the Italian C. and S. Apennines, from Monti Sibillini to Mt Pollino. It has apparently become extinct in the Modena Apennine (Fiumalbo).
089.024.0.007.0	*Lycaena subalpina* was correctly separated at species rank from *Lycaena tityrus* by Descimon (1980. Nota lepid., 2: 123–125). The two taxa occur parapatrically over most of the Alps. The apparently stabilised hybrids, described as *Chrysophanus dorilis brunnea* Wheeler, 1903 (Butts Switz., p. 18, TL: [Bernese Oberland:] Mürren), occur only in a few and spatially restricted areas such as, in Italy, on the southern slopes of the Dolomites.
089.024.0.011.0	*Lycaena helle* was reported from Italy by de Prunner (1798. Lepidoptera Pedemontana Illustrata), as well as by Hinterwaldner (1867. Zeitschrift des «Ferdinandeums» für Tirol und Vorarlberg, innsbruck, (3) 13: 224) and by Marchi, 1910 (I Ropaloceri del Trentino). Although these reports might be due to identification errors (for instance by confusion with *L. thersamon*), it is well possible that *L. helle* became extinct in Italy sometime after 1916. In the latter case, *L. helle* would be the one and only Italian butterfly species having become extinct across the Country, in historical times. See also note 089.001.0.007.0.
089.024.0.011.1	See Heppner (1981) for the date of publication of this name.
089.025.0	The genus *Thecla* includes in total only 2 (3) species, all Palearctic (see Weidenhoffer & Bozano, 2007. In Bozano (Ed.), Guide to the Butterflies of the Palearctic Region, Lycaenidae, pt. 3, Omnes Artes, 97 pp.). See also note 089.017.1 and 089.25a.0.
089.25a.0	Satoshi Koiwaya (2007. The "Zephyrus" Hairstreaks of the World, 1: 300 pp., 2: 256 Pls.) lists a total of 183 species, included in the 52 Genera globally representing the Tribe Theclini of the Subfamily Theclinae. Two of these Genera, (*Hypaurotis* and *Habrodais*, for a total of 3 species) are North American, while 3 (*Austrozephyrus*, *Borneozephyrus* and *Palawanozephyrus*, all monobasic) are Indonesian. The remaining genera and species are either Palearctic, or occupy the transition area with the Oriental Region. European species are 3, 2 of which (*Laesopis roboris* and *Thecla betulae*) obviously belong to separate genera. As concerns the Italian fauna, problems at genus level concern only the third of these species, i.e. *Papilio quercus* Linné, 1758. Apart from the possibility of following Koiwaya and keeping it in a monotypic genus *Quercusia*, the genus to which this species is genitalically closer is *Favonius*. With respect to *Neozephyrus* and *Chrysozephyrus* (which look even more similar in external morphology), in fact, its male genitalia differ in having reduced saccus and a distally spiny aedeagus, while the female genitalia show a bilobate lamina postvaginalis, almost suggesting the shape of a pair of wings (see also Fujioka, 1994. Butterflies, 7: 3–17). Species included in the genus *Favonius* (comprised the monobasic *Quercusia*) are globally 11.

089.25a.1	Not all the diagnostic characters considered typical of the genus *Favonius* are observed in *F. quercus*. In the male genitalia, the valvae have non-spiny ampulla and the coecum penis is very elongate. In the female genitalia, processes of the lamella postvaginalis are almost filiform. For this species Verity (1943) had created the genus-group name *Quercusia*, which may be subjectively, although perhaps unnecessarily, considered a separate monobasic genus or subgenus.
089.26.0	The genus *Satyrium*, Holarctic, includes 45 species in the Palearctic Region and 18 in the Nearctic (see Weidenhoffer, Bozano & Churkin, 2004. In Bozano (Ed.), Guide to the Butterflies of the Palearctic Region, Lycaenidae, Omnes Artes, pt. 2, 94 pp).
089.026.1	The genus *Strymon*, which was for sometime considered to include all, or most, European species of this group, is actually known to be confined to the New World. *Strymon* includes in total 29 North American and 25 exclusively South American species.
089.026.2	*Nordmannia* is currently considered a subjective synonym, or perhaps a subgenus of *Satyrium.* As concerns European species, this name has been used sometimes at either genus or subgenus level, to include *S. ilicis*, *S. esculi* and *S. acaciae* (see Riley, 1958. Proc. 10th internatl Congr. Ent., Montreal, 1: 281–288).
089.026.3	*Strymonidia* is currently considered a subjective synonym of *Satyrium.* As it concerns European species, this name was sometimes used at genus or subgenus level to include *S. spini*, *S. w-album* and *S. pruni*, following Riley (1958. Proc. 10th internatl Congr. Ent., Montreal, 1: 281–288).
089.026.4	*Chattendenia* is currently considered a subjective synonym of *Satyrium.*
089.026.4	*Fixenia* is currently considered a subjective synonym of *Satyrium.* As for European species, this name is sometimes used to separate *S. pruni* from other *Satyrium* species.
089.026.0.002.0	In Italy, *Satyrium esculi* is confined to W. Liguria and to the low altitudes of the Ligurian Alps.
089.026.0.004.0	In Italy *Satyrium pruni* is confined to the Padano-Venetian plains.
089.026.0.005.0	See note 089.001.0.007.0 as for authorship and date of publication.
089.026.0.006.0	As concerns the spelling "w-album", see Art. 32.5.2.4.3 ICZN.
089.027.0	Several recent authors consider again the genus *Callophrys* to be Holarctic (Lamas 2008: http://www.ucl.ac.uk/taxome/gbn/ ; Pelham 2012 http://butterfliesofamerica.com/US-Can-Cat.htm) and to include 25 species in North America and 6 in the Palearctic. Should the limits of this genus be further extended to include the (mainly) Palearctic species currently classified in *Ahlbergia*, *Cissatsuma*, and *Novosatsuma*, the total number of its Palearctic species would increase respectively by 21, 6 and 8 (see Johnson 1992. N. ent. Nachr., 29: 1–141). The identification of species of the latter group of genera remains difficult, even after dissection of the genitalia.
089.027.0.002	The first observation of *Callophrys avis* within the current Italian territory is due to Marco Bonifacino, who photographed it by Savona in 2007 (verbal communication). Its occurrence in the area was confirmed in 2008 and 2009 (see Bonifacino *et al.*, 2009. Doriana, 8 (365): 1–7). Verity (1943. Farfalle diurne d'Italia, 2: 380) correctly observed that the first description of this species was verbally presented by Chapman during the meeting of the Entomological Society of London held on 2 June 1909. The proceedings of this meeting were summarised by M. A. Dixey and published on 20 September 1909 (Proc. ent. Soc. Lond., 1909: xxix). The formal publication of Chapman's original description, however, only occurred shortly after the meeting, on 15 June 1909 (Entomologist's Rec. J. Var., 1909–21 (6): 130–131) and takes nomenclatural precedence over the former. On the following year, Chapman (1910. Trans. ent. Soc. Lond., 58 (2): 85–106, 43 Pls) gave a very detailed description of this species, accompanied by the description and illustration of many biological and morphological features, including its larval development.
089.028.0	The genus *Leptotes* includes a total of 29 species. *Leptotes* is mainly an American genus (16 species in total, 5 of which occur only or mainly in North America). African species are 13, while only one species is found in S.E. Asia and Oceania. The single Italian species is a well known migrant, which penetrates across the entire Mediterranean basin and the whole African continent.
089.028.1	The genus group name *Syntarucus* was used for a long time to designate the Old World species of this group. As already suggested by Stempffer (1967. Bull. Brit. Mus. (N. H.), Entomology, suppl. 10: 217–221), the definition of the genus *Leptotes* might be slightly broadened to include characters of the 2 species generally classified in the genus *Cyclirius*.
089.028.a.0	The genus *Cacyreus*, entirely Afrotropical, includes 10 species, which range all across the Sub-Saharan area, the Comoros and Madagascar.

089.028a.0.001.0	A South African species which consumes, in its area of origin, both native and cultivated *Geranium* and *Pelargonium* species. It was accidentally introduced into Europe and was first described as a permanent resident on the Island of Mallorca, in the Autumn of 1990 (Sarto y Monteys 1991. SHILAP Revta Lepid., 19 (74): 165–166). Starting from the Balearic Islands, it rapidly spread to occupy the whole W. Mediterranean area, where it is a pest of domestic *Pelargonium* species. Keeping a generally eastwards trend, it reached Croatia in 2009 (Marko & Verovnik 2009) and Greece in 2010 (Martinou *et al.*, 2011). Some stray specimens, probably resulting from independent importations, were observed in Belgium (Brussels: see Troukens, 1991. Phegea, 19 (4): 129–131) and even as far north as in the UK (1997, see Thomas & Lewington 2010. The Butterflies of Britain and Ireland, 288 pp, British Wildlife Publ., Gillingham, Dorset, UK) and in Sweden, in 2005 (Lindeborg 2007. Ent. Tidskr., 128 (1/2): 19–32.) In Italy it currently occurs all over the Country (Quacchia *et al.* 2008. Biodiv. Consvn, 17 (6) 1429–1437).
089.028.b.0	The genus *Azanus* includes 8 species, 6 of which are mainly Afrotropical with some extention to the Near East, while the others are Oriental.
089.028.b.0.001.0	In Italy, *Azanus ubaldus* is present only on the Isle of Lampedusa (Caporale & Guidi, 2013. Boll. Soc. ent. ital., 145 (2): 147–149). Elsewhere it occurs all over most of the African continent and as far East as in Myanmar.
089.029.0	The genus *Lampides* is monobasic. Its date of publication has been fixed by the ICZN with Op. 150 (Dir. 4).
089.029.0.001.0	Irrespectively of its small size, *L. boeticus* is a vigorously migratory species. Apart from the fully forested areas, it is widespread all over Africa, Madagascar and all across the temperate and subtropical parts of Eurasia and Oceania, reaching as far as to the S.E. Australia. It may have established some stable colonies even New Zealand and on many other oceanic islands, such as in the Maldives and the Hawaii, where it may have been accidentally introduced.
089.029.a	The genus *Zizeeria* includes only 2 species, both mainly Paleotropical and only marginally penetrating the temperate area.
089.029.a.001.0	This migratory species is widespread from Algeria and the E. Mediterranean to the whole subtropical belt of Asia and Australia. In Italy it was observed for the first time at Marsala (Bigot & Stempffer, 1954. Revue fr. Lépid., 13/14: 123–130) where it quickly became extinct, but was observed later on at Lampedusa (Romano & Romano, 1995. Nat. siciliano, 9 (suppl.): 693–722). It is uncertain whether this species represents a stable component of the Italian fauna.
089.030.0	The genus *Cupido* (s. str.) includes 10 fully Palearctic species. It may be subjectively extended to include also the subgenera *Everes* and *Tongeia*, for a total of 29 species.
089.030.1	The subgenus *Everes* is separated from *Cupido* by having smooth (as opposed to hairy) palpi, in combination with “tailed” hind wings (untailed in *Cupido*). No obvious structural differences separate *Everes* from *Tongeia* (Asiatic), which is mainly characterised by its wing markings. Several authors subjectively consider all three as distinct genera. *Everes* is Holarctic and includes 6 Palearctic and 2 Nearctic species. The date of publication of the genus group name *Everes* Hübner was fixed by the ICZN in Op. 150 (Dir. 4).
089.031.0	The genus *Celastrina* is widespread in the Palearctic, the Oriental and the Nearctic Regions. Within the Palearctic area, it includes 13 species, while the Indonesian species are only 3. For a very long time, only 2 species were thought to occur in North America, but several taxa formerly ranked as "subspecies" of *C. argiolus* have been recently raised to species level, while some “new” species have been described. The total number of Nearctic species, therefore, has increased to 9 (see also Eliot & Kawazoé, 1983. Blue butterflies of the *Lycaenopsis* group, 309 pp for pre DNA-era taxonomy. See Pelham 2012 http://butterfliesofamerica.com/US-Can-Cat.htm for N. American taxa).
089.032.0	The genus *Pseudophilotes* includes 13 species, all Palearctic. It was separated from the unrelated Nearctic genus *Philotes*, currently monobasic (*Philotes sonorensis* (Felder & Felder, 1865)). The current taxonomy of this group of genera was established Beuret (1958. Mitt. ent. Ges. Basel, 8: 61–79 and 1959. 9: 80–84; and by Mattoni, [1978] J. Res. Lepid., 16 (4): 223–242). Even though *Pseudophilotes* is listed as a separate genus in Catalogue of Life, Fauna Europaea, Funet and PESI, it is sunk in the synonymy of the monobasic genus *Scolitantides* by Kudrna *et al.* (2012). *Pseudophilotes* and *Scolitantides* are, however, morphologically clearly separate, since the former has much smaller subunci and ventrally sinuous valvae.
089.032.0.001.0	*Pseudophilotes barbagiae* is an endemic species of the mountains of C. Sardinia. Its preimaginal instars have been described by Jutzeler *et al.* (2000. Linn. belg., 17 (6): 239–246).
089.032.0.003.0	*P. vicrama* occurs in Italy only in a very restricted area of the E. Alps. From here, its range extends, to the East, to the Tibetan area.

089.033.0	The genus *Scolitantides* is monobasic. Its date of publication has been fixed by the ICZN with Op. 150 (Dir. 4).
089.034.0	The genus *Glaucopsyche* is Holarctic and includes 9 Palearctic and 2 Nearctic species. Some authors have used this genus group name to include also species generally classified under *Maculinea*, a group with which it shares no strict phylogenetic relationship (see note 089.035.0 for some additional details).
089.034.0.002.0	*G. melanops* occurs in Italy only in a restricted area of the North West (W. Liguria).
089.035.0	The genus *Maculinea* includes at least 8 species, all Palearctic (see Sibatani *et al.*, 1994. Tyô to Ga, 44 (4): 157–220 for a review of their morphology). Since Fiedler's (1988. J. Insect Consvn, 2: 3–14) publication on *Maculinea*-type myrmecophyly, some authors (Als *et al.*, 2004. Nature, 432: 386–390), mainly working on a molecular and/or a cladistic basis (Pech *et al.*, 2004. Cladistics 20: 362–375; Zdnek *et al.*, 2007. Syst. Ent., 32: 558–567), have suggested that the genus group name *Maculinea* is a junior synonym of *Phengaris*. We think this synonymy to be premature, taking into account that i) *Maculinea* is a monophyletic clade, ii) some *Maculinea* species live in China at short distance from typical *Phengaris* and iii) *Phengaris* (s. str.) might prove itself paraphyletic. These same works have demonstrated that *Maculinea* and *Glaucopsyche* are not strictly related, phylogenetically, and cannot be considered synonyms. Decision by the ICZN is pending on a proposal to afford priority to *Maculinea* Van Eecke, 1915 over *Phengaris* Doherty, 1891 whenever the two names are considered synonyms (case 3508, Balletto *et al.*, 2010. Bull. zool. Nom., 67 (3): 129–132).
089.035.0.001.0	*M. alcon* represents the hygrophilous counterpart of the xerophilous *M. rebeli.* Although the 2 species cannot be separated from each other on external or genitalic morphology, they are characterised by many different ecological and otherwise biological features. The two taxa, however, are frequently considered subjective synonyms. See also to note 089.001.0.007.0 as concerns the authorship and date of publication and note 089.035.0.003.0
089.035.0.002.0	*Maculinea arion* is endangered in Europe (van Swaay *et al.* 2010) and is accordingly included in the Annex IV of the Habitats Directive, which forbids "all forms of deliberate capture or killing of specimens … in the wild", as well as "the keeping, transport and sale or exchange, and offering for sale or exchange, of specimens taken from the wild, except for those taken legally before this Directive was implemented".
089.035.0.003.0	Some authors, mainly on a molecular basis (Als *et al.*, 2004. Nature, 432: 386– 390), consider *M. rebeli* conspecific with *M. alcon*. Even though aspects of the external morphology seem to concur with this hypothesis, many biological data suggest that the 2 taxa should better be kept taxonomically distinct at species level, at least for the moment. See also to note 089.035.0.001.0
089.035.0.004.0	*Maculinea teleius* is threatened (Vulnerable) in Europe and is included in the Annex IV of the Habitats Directive, which forbids "all forms of deliberate capture or killing of specimens … in the wild", as well as "the keeping, transport and sale or exchange, and offering for sale or exchange, of specimens taken from the wild, except for those taken legally before this Directive was implemented". The only perhaps potentially reliable citation of the occurrence in Italy of *Maculinea nausithous* (*Lycaena nausithous* Bergsträsser, [1779] (Nomencl. beschr. Ins. Grafshaft Hanau-Münzenberg, 2: 70, Pl. 43, Fig 1) is due to Marchi (1912. I ropaloceri del Trentino, p. 152), who reported it from "Calentino" and "Malga dei Cavalli" (TN). Notwithstanding much research effort carried out in this area, however, *M. nausithous* was never observed again within the Italian territory. Reports of *M. nausithous* from central Italy are mistaken and were based on misidentified specimens of *M. rebeli*.
089.036.0	The genus *Iolana* is fully Palearctic. It includes at least 8 allopatric taxa, at least some of which certainly qualify as distinct species.
089.036.0.001.0	Many authors, starting at least with Bethune-Baker (1914) have written this name as "iolas" while others wrote "jolas", The spelling "iolas" directly derives from Ochsenheimer's (1816) spelling (on p. 144). The same author, however, wrote this name as "jolas" (with a "j") on p. 24, no. 3 of the same paper. Since the original description of the species is on p. 144, we think it better to use the spelling "iolas", which is also the most widespread in the scientific literature.

089.037.0	*Plebejus.* Male genitalia. Aedeagus cylindrical, curved downwards; suprazonal part almost as long as the subzonal; ostium elongate, about as long as the suprazonal part; flagellum (Chapman's process sensu Nabokov) prominent, spatulate to digitate, 1/2–2/3 as long as the ostium; vesica prominent, almost completely covered in short, thin bristles. Socii digitate, laminar, transversely curved and concave on ventral surface, longitudinally excurved, reflex at apex into a small, flap like structure. Dorsal and ventral flaps absent. Subunci of the angulate falx type; basal plate prominent, hatchet shaped; shoulder also prominent; humerulus thick, straight to slightly curved backwards; elbow prominent to broadly rounded; cubitus slender, elongate, truncate and sharply hooked at apex, 2/3 of socii in length, or shorter. Juxta U-shaped; body sclerotized, with or without a central and upwards directed prominence. Valvae fusiform; costal corner scarcely prominent; rear costa 2/3 of the fore costa in length; dorsal process digitate, spatulate and serrate or combed at apex. Female genitalia. Henia membranous or feebly sclerotized towards apex, elongate, parallel sided; epistigmal lobe square cut, longitudinally split in the middle; hypostigmal lobe rounded, barely protruding from the epistigmal; sterigma stigmal, longitudinally elongate or pentagonal, with 2 small lateral projections. Hypostema feebly sclerotized; arms not reaching each other on midline; body sclerotized in *Plebejus vogelii* only. Ductus bursae elongate, about twice as long as the henia. Corpus bursae globular, 1/2 as long as the henia; signa present or absent. Androconia: lamina rather elongate, sub elliptical to truncate at apex; petiole short. Even though most European databases concur in classifying under *Plebejus* species of *Lycaeides, Albulina, Vacciniina, Agriades,* this treatment is not supported by genitalic or otherwise structural characters. Molecular results obtained by Talavera *et al.* (2013. Cladistics, 29: 166–192) are only partially compatible with the (mainly) genitalic features used for this classification. See also notes 089.038.0; 089.041.0 and 089.042.0.
089.037.1	Some instability in the spelling and dating of the name *Plebejus* originated with the discovery of one copy of the supposedly first edition of Kluk's work, dated in the front page as of 1780 (see Paclt 1955. Beitr. Ent., 5 (3/4): 428–431). In this first edition, the spelling of the name (i.e. *Plebeius*) differs from the one (*Plebejus*) used by Linné (1758 Syst. Nat., ed. X) on top of pp. 483–485. Kluk, perhaps as a consequence, changed it again to *Plebejus* in another printing of the same book (1780), which is available on line at the address: http://books.google.it/books/about/Zwierz%C4%85t_domowych_i_dzikich_osobliwie_k.html?id=S5s5AAAAcAAJ&redir_esc=y) as well as in the 3rd edition (1802) of his work. Following Paclt's (1955) conclusions, some authors started to cite this name as "*Plebeius*" Kluk, 1780. Such a correction in both date and writing, however, is nomenclaturally doubtful even taking into account provisions of Art. 58.2, since the spelling "*Plebejus*" (with a "j") and the date of 1802 are listed in the "Official Lists and Indexes of Names in Zoology" (ICZN 1954, Op. 278). Bálint *et al.* (2001. Folia ent. hung., 62: 177–184) have suggested that this name should be cited as "*Plebejus* Kluk, 1780". Although this suggestion is acceptable, Bálint *et al.* failed to submit a formal application to this effect in "Bulletin of Zoological Nomenclature" and, as a consequence, ICZN never issued any additional ruling on the subject, which remains settled under Op. 278. A similar reasoning, in this case only as concerns the dates of publication, applies to Kluk's genus-group names *Nymphalis*, *Heliconius* and *Danaus* which would date from 1780 (1st edn) instead than from 1802 (3rd edn), as stated in Op. 278. To promote nomenclatural stability, therefore, we have submitted an application to ICZN asking that Op. 278 is corrected as in the online version of Kluk's (1780) book (Balletto *et al.*, 2013. Bull. zool. Nom., Case 3659). See also note 089.009.2. The genus *Plebejus* (s. str.) includes about 12 species in the Palearctic Region and perhaps one in the Nearctic (*Plebejus saepiolus*).
089.037.2	Genitalic characters used to distinguish *Plebejides* from *Plebejus* are very variable within the former taxon, which from the morphological point of view is subjectively better seen as a subgenus. Its genus level separation within a broader genus *Kretania* would be, however, supported by the molecular data obtained by Talavera *et al.* (2013. Cladistics, 29: 166–192). Lumping *Plebejides* with *Kretania* is unsupported by morphological data.
089.037.0.002.0	The state of secondary homonymy between *Lycaena lycidas* Trapp and *Polyommatus lycidas* Meigen came into being when they were classified in what was at the time the omnibus genus "*Lycaena*" (ex errore: see note 089.024.0.). Currently, as long as *Plebejus* and *Lycaeides* will be taxonomically separate, such homonymy would disappear. Art. 53.3 of the ICZN, however, states that "A junior secondary homonym replaced before 1961 is permanently invalid …". For this reason the name *P. lycidas* Trapp is invalid. *P. trappi* is a member of the *P. pylaon* species complex.

089.038.0	*Lycaeides.* Male genitalia. Aedeagus slender, curved, elongate, suprazonal part 2/3 the subzonal or longer, lanceolate in dorsal and ventral view, acuminate and obliquely cut in lateral view; ostium as long as the suprazonal part or slightly shorter; flagellum digitate to lanceolate 1/4 to 1/2 as long as the suprazonal part; vesica moderate, smooth or covered in short spiny bristles. Socii broadly triangular, spatulate, pointed at apex; flaps absent. Subunci of the plain falx type; basal plate inconspicuous, shoulder and elbow broadly rounded; cubitus 1/4 to twice as long as the humerulus, as long as the socii to 1/3 shorter, hooked and depressed at apex. Juxta U or V-shaped; arms slender, about as long as the subzonal part of aedeagus; body small to moderate. Valvae fusiform, costal corner feebly marked, rounded, rear costa 1/2–2/3 as long as the fore costa; upper process thicker than lower process, curved towards the mesial side, almost vertically truncate, toothed to combed at apex. Female genitalia. Henia membranous, cylindrical; hypostigmal lobe broadly rounded to almost digitate, protruding well beyond the truncate epistigmal part. Sterigma absent. An intrahenial elongate sclerotization of ductus is present in some species. Hypostema arms feebly sclerotized, body absent. Ductus bursae slender, 1.5–2 times as long as the henia. Corpus bursae shorter than the henia, pear shaped; signa absent. Androconia: lamina more or less broadly rounded. *Lycaeides* is Holarctic and includes 15 species in the Palearctic and 2 (3) in the Nearctic Region. The genus-level taxonomic separation of *Lycaeides* from *Plebejus* has been often questioned. Since the two taxa are easily distinguishable by very clear-cut characters in their male and female genitalia, however, we will maintain them separate, at least as long as some detailed cladistic or molecular studies will be published. The date of publication of *Lycaeides* has been fixed by the ICZN with Op. 150 (Dir. 4). Although *Lycaeides* is treated under *Plebejus* by all current European databases, genitalic characters (subunci etc.) demonstrate that it may not be strictly related to this genus, and may be closer to *Chilades.*
089.038.0.001.0	*Lycaeides abetonicus* is the xerophilic counterpart of *L. idas* (mesophilous). The two taxa are clearly separated by their genitalic characters, as follows. 1) in the socii: the transversal rib is sharp (weak or absent in *L.* idas) and on ventral surface the distal fold is barely distinct (well defined in *L.* idas) 2) in the aedeagus, the flagellum is elongate (as in *L. corsicus*; short in *L. idas*) about ½ as long as the suprazonal part; 3) the furcal body is transverse and sclerotized (as in *L. idas*); 4) the androconial scales are elongate. As concerns Italy, *L. idas* and *L. abetonicus* occur in co-habitation and synchronically in various parts of the W and C. Italian Pre-Alps (southern slopes), as well as in the proximity of Lago Maggiore and Lago di Como, whereas only *L. abetonicus* occurs all along the Apennines. This species may be the sister taxon of *L. corsicus*.
089.038.0.003.0	*Lycaeides corsicus* is structurally well characterised. 1) The distal end of its fore tibiae bear an anterior spine, which is similar, although smaller, to the spine shown by *Plebejus argus*; 2) the androconial scales are small and orbicular; 3) in the male genitalia, the furca is narrow and the furcal body is membranous; 4) the subunci are somewhat similar to those of *L. argyrognomon*, since the inner angle of the elbow is rather more rounded than in *L. idas*, which caused some misidentification (see Higgins, 1975. Boll. Soc. sarda Sci. nat., (9) 15: 1). 4) Still in the subunci, the cubitus is shorter than in any other species, and barely longer than the humerulus. 5) In the female genitalia, the henia is narrow and similar to that of *L. idas.* It occurs in Corsica, Sardinia and on the Isle of Elba. Larvae of *L. corsicus* are different from those of *L. idas (*see Jutzeler & Leigheb 2004. Linn. belg., 19 (6): 285–290). *Lycaeides corsicus* is deemed a separate species in Fauna europaea, PESI and Funet (as *Plebejus bellieri*), but is considered subspecies of *Lycaeides idas* in Catalogue of Life and in Kudrna *et al.* (2012).
089.038.0.003.1	Some authors have contended that the correct “basionym” to designate this species should be *Lycaena argus bellieri* Oberthür, 1910. At the time when he published this name, however, Oberthür was unaware that Tutt had described already the same taxon as *Plebeius* [sic!] *argyrognomon corsicus*. Oberthür’s name, in other words, was created to designate a taxon of what is subjectively the genus *Lycaeides*. This description is accompanied by a detailed differential diagnosis to separate it from a "race" of what is currently *Plebejus argus*, which Bellier (1862) had recently described as *Lycaena aegon* var. *corsica*. In other words, since the name *Plebejus argus bellieri* was not created as a Replacement name, Art. 53.3 of the ICZN does not apply and this species should be identified by Tutt’s, name at least in so far as *Lycaeides* is considered distinct from *Plebejus*. This species is restricted to Sardinia, Corsica and the Isle of Elba. Its preimaginal instars have been described by Jutzeler & Leigheb, 2004 (Linn. belg., 19 (6): 285–290).
089.038.0.003.2	Jutzeler *et al.* (2003. Linn.belg., 19 (2): 65–80) have described some slight morphological differences between the pre-imaginal instars of the population occurring on the Isle of Elba and those of the Sardinian “mainland”, which these authors consider as a demonstration that *L. villai* is a separate species.
089.038.0.004.0	This species group name would have been primary homonym of *Papilio idas* Linné, 1758 (Syst. Nat., (ed. x) 1: 488, no. 192). The latter name, as a consequence, has been suppressed by the ICZN (Op. 269). The Italian range of *Lycaeides idas* (s. str.) is limited to the Alps and the pre-Alps.

089.039.0	*Aricia.* Male genitalia. Aedeagus: cylindrical, curved, or straight (*Pseudoaricia*), suprazonal part equal to the subzonal or longer, chisel shaped at apex, opening dorsal, longitudinal. Flagellum absent. Socii: digitate, inflate at apex, elongate, ventral flap large, broadly rounded at mesial margin, pointed caudad. Dorsal flap double: cephalic part narrow, tapering cephalad and caudad, separated from the triangular caudal part by a concave indentation, hooked cephalad. Subunci: of the humped falx type (slightly angulate in *Pseudoaricia*), 2/3 to 1/3 as long as socii, cubitus slightly shorter to longer than basal plate. Juxta U- or V-shaped, arms thick, longer than suprazonal part of aedeagus, body sclerotized, transverse. Valvae fusiform, rear costa 1/2 as long as the fore costa, dorsal process long, spatulate, slender, finely serrate. Ampulla serrate on dorsal line (*Aricia*), or smooth. Female genitalia. Henia generally membranous, cylindrical hypostigmal lobe triangular. Sterigma with a single (hypostigmal) or double plate. Epistigmal plate (if sclerotized) transverse, broader than long. Hypostema: arms and body connected (*Pseudoaricia*), or separate. Ductus bursae 1.5–2.5 times as long as the henia, slender. Corpus bursae about as long as the henia, signa absent or present. The genus *Aricia* includes 18 species, all Palearctic. Although all European databases concur in sinking species of *Eumedonia* under *Aricia*, no molecular, genitalic, or otherwise structural character supports this classification (see also Talavera *et al.*, 2013. Cladistics, 29: 166–192).
089.039.1	The genus group name *Pseudoaricia* may be subjectively used at subgenus rank, to designate species of the *Aricia nicias* group (8 in total, all Palearctic), all having dimorphic males and distinctive male and female genitalia.
089.039.0.001.0	See note 089.001.0.007.0 as concerns the authorship and date of publication.
089.039.0.002.0	The monovoltine populations of continental Europe and the Alps are sometimes classified as *Aricia artaxerxes* (*Hesperia artaxerxes* Fabricius, 1793. Ent. syst., 3 (1): no. 129; LT: 'Anglia' [= Scotland]). It is possible, although it was never fully demonstrated that this is the correct taxonomic explanation for the continental European populations (Aagard *et al.*, 2002. Biol. J. Linn. Soc., 75: 27–37). No molecular-level information is available, however, on the populations from the Alps and the Italian Apennines and we prefer to maintain their more traditional classification under *A. allous* (see Sañudo-Restrepo *et al.*, 2013. Mol. Phyl. Evol., 66: 369–379).
089.039.0.003.0	A multivoltine species occurring in N.W. Africa, the Canaries, Spain and Sardinia. In S. Corsica it occurs together with *A. agestis* (see Balletto *et al.*, 1981. Nota lepid., 4 (3): 81–92), although fine scale cohabitation remains undemonstrated.
089.040.0	*Eumedonia*. Male genitalia. Aedeagus slender, curved to almost straight, suprazonal part about two thirds as long as the subzonal, lanceolate to narrowly triangular in dorsal and ventral view, roundedly cut in lateral view. Ostium 2/3 as long as the suprazonal part; flagellum 1/3 as long as the ostium. Socii digitate, slightly excurved; dorsal flap vestigial, elongate, directed upwards; ventral flap rounded at mesial margin. Subunci of the angulate falx type, basal plate hatchet shaped; shoulder pointed, prominent; falcal space very narrow; elbow rather to very prominent; cubitus longer than humerulus, straight to slightly curved, truncate and hooked at apex. Juxta U-shaped; furcal arms slender, 1/4 longer to 1/4 shorter than the aedeagus; furcal body well sclerotized, transversely rectangular. Valvae fusiform, fore costa twice as long as the rear part; dorsal process digitate, rounded and thinly serrate at apex. Ventral process of the excavate type, rounded. Female genitalia. Henia membranous, inflate at base; epistigmal lobe broadly triangular, well developed. Hypostigmal lobe triangular, rectangular, or transversely elongate, well protruding. Sterigma hypostigmal, longitudinally elongate, rounded at base and obtusely triangular at apex, bearing a pair of dorsal and lateral projections which encircle the sides of the distal part of the henia. Hypostema prominent, well sclerotized, arms clubbed at apex, body large or middle sized. Ductus bursae slender, almost 3 times as long as the henia. Corpus bursae pear shaped, as long as the henia; signa variable. Androconia absent. *Eumedonia* is phylogenetically neither strictly related to *Plebejus*, nor to *Aricia*, as it is sometimes suggested. It includes 4 species, all Palearctic.

089.041.0	*Albulina*. Male genitalia. Aedeagus straight, cylindrical, thick, suprazonal part 1/3 as long as the subzonal, pointed at apex, ostium almost as long as the suprazonal part; flagellum elongate, vesica prominent. Socii elongate, rounded at apex; dorsal flap vestigial, apical; ventral flap prominent, inflate on mesial side. Subunci of the angulate falx type, 1/2–2/3 as long as the socii. Basal plate large, shoulder prominent; humerulus flat, straight; elbow prominent; cubitus cylindrical, straight, twice as long as the basal plate, hooked and dented at apex. Falcal space narrow. Female genitalia. Henia membranous, elongate to rather thickly built, inflate at base; sterigma stigmal, rounded at rear margin, broader than long. Hypostema represented by the arms only. Ductus bursae almost twice as long as the henia, slender. Corpus bursae longer than the henia; signa normally prominent. Androconia: lamina elongate, mesomorphic or neomorphic. *Albulina* includes at least 36 morpho-species in total, (17 in the subgenus *Albulina*) all living in the Palearctic mountains, with the only exception of *A. (V.) optilete* which, apart from Japan, reaches the Yukon. Morpho-anatomical data concur with the molecular results obtained by Talavera *et al.* (2013. Cladistics, 29: 166–192) in demonstrating that *Albulina* (including *Vacciniina*) is not part of the genus *Plebejus*, even though it is listed as such in most European databases, with the notable exception of FUNET. Genitalic characters would suggest a closer relationship with *Cyaniris (*see note 089.043.0)
089.041.1	Apart from FUNET, *Vacciniina* is consistently listed as a subgenus of *Plebejus* in all other European databases. However, and irrespectively of some obvious superficial divergence in the adults' morphology, the male and female genitalia of species traditionally classified under *Vacciniina* are indistinguishable from those of *Albulina*. We tentatively include it as a subgenus of the latter. In case *Albulina* were deemed congeneric with *Cyaniris*, the latter name should nomenclaturally prevail. *Vacciniina*, whenever subjectively used at genus or subgenus rank, includes 19 species, all Palearctic (only *A.* (*V.*) *optilete* reaches the Yukon).
089.042.0	*Agriades.* Male genitalia. Aedeagus straight, dorso-ventrally flattened, suprazonal part 1/3–1/4 as long as the subzonal, triangular in dorsal view, truncate at apex; ostium subterminal, as long as the (reduced) suprazonal part. Flagellum short. Socii generally elongate, spatulate to slightly triangular in general outline, rounded at apex; dorsal flap vestigial, limited to the very distal end; ventral flap flattened, down curved. Subunci of the angulate falx type; basal plate small, shoulder scarcely prominent, humerulus cylindrical, flat, straight; elbow scarcely prominent; cubitus cylindrical, elongate, regularly curved, hooked at apex, about as long the socii or longer. Juxta narrowly V-shaped, arms very thin, longer than the suprazonal part of aedeagus, body sclerotized, longitudinal. Valvae fusiform; costal corner rather sharp, rear costa 1/2 as long as the fore costa; dorsal process slender, serrate at distal end; ventral process rounded. Female genitalia. Henia rather massive, not very elongate, membranous, inflate at base; sterigma stigmal, broadly rounded distally, with two small and rounded lateral projections. Hypostema only represented by the not very sclerotized arms. Ductus bursae 1.5–2 times as long as the henia, slender. Corpus bursae about as long as the henia, globular; signa absent. Androconia: lamina very elongate of the *Polyommatus* type. *Agriades* includes 1 Holarctic species, 7 or 8 Palearctic species and 1 or 2 Nearctic species. It is not phylogenetically close to the genus *Plebejus*. Its date of publication has been fixed by the ICZN with Op. 150 (Dir. 4). Apart from FUNET, which lists it as a separate genus, *Agriades* is either sunk in the synonymy of *Plebejus*, or considered subgenus of the latter, in all other European databases. Since the latter treatment is unsupported by genitalic characters, we will list it as a separate genus, at least for the moment, and even though the molecular data obtained by Talavera *et al.* (2013. Cladistics, 29: 166–192) indicate a close relationship with *Albulina*.

089.043.0	*Cyaniris*. Male genitalia. Aedeagus straight, cylindrical, suprazonal part less than 1/2 as long as the subzonal, broadly spatulate in dorsal and ventral view, obliquely cut in lateral view. Ostium as large as the suprazonal part. Socii lancet-shaped, pointed at apex; dorsal flap very small, much longer than broad, apical; ventral flap broad, obliquely cut on mesial side. Subunci of the angulate falx type; basal plate hatchet shaped, shoulder prominent, angulate; elbow prominent, pointed; cubitus straight, pointed at apex, 1.5 to twice as long as the humerulus, 1/2 as long as the socii. Juxta U-shaped, arms thin, as long as the aedeagus; body prominent, rectangular. Valvae fusiform, upper process slender, digitate, serrate at apex; lower process regularly rounded; rear costa 1.3–1.5 times as long as the fore costa. Female genitalia. Henia membranous, cylindrical to slightly inflate at base and/or apex; epistigmal lobe small, rounded, bilobate; hypostigmal lobe broader but barely longer, rounded at apex. Sterigma stigmal, broader than long, with a pair of lateral protuberances circling the distal part of the ductus bursae. Hypostema well developed, U-shaped; body normally sclerotized. Ductus bursae as 1–2 times as long as the henia. Corpus bursae pear shaped, 1–1.5 times as long as the henia. Signa absent. Androconia elongate, relatively broad. *Cyaniris* includes 6 morpho species, all Palearctic. *Cyaniris* is listed as a separate genus in Catalogue of Life, Fauna Europaea, the European Red-List and PESI, but is sunk as a synonym of *Polyommatus* by FUNET and the European Atlas (Kudrna *et al.*, 2011). We will tentatively consider it a separate genus, even though it shares several genitalic characters with *Albulina*. It mainly differs from the latter in having smooth aedeagus, longer ostium penis, and longer suspensoria. As concerns female genitalia. It differs in having more strongly sclerotized hypostema, with a well-developed corpus. Morpho-anatomical features concur with molecular data (Talavera *et al.* 2013. Cladistics, 29: 166–192) in demonstrating that *Cyaniris* has no strict phylogenetic relationship with *Polyommatus*.
089.044.0	*Polyommatus.* Male genitalia. Aedeagus almost cylindrical to strongly depressed; suprazonal part 1/4 as long as the subzonal, trapezoidal or sub-orbicular, slightly bilobate at apex; ostium almost as long as the upper surface of suprazonal part. Flagellum absent. Vesica smooth. Socii digitate, pointed to almost acuminate at apex. Dorsal flap small, tapering both cephalad and caudad, broadly rounded on mesial side; ventral flap much larger, similarly shaped. Subunci of the angulate falx type; basal plate moderate, hatchet shaped; shoulder rather prominent; humerulus directed obliquely cephalad, almost straight; elbow scarcely to rather prominent; cubitus S. shaped to straight, hooked (not depressed) at apex, about as long as the humerulus, 70 to 80% the length of socii. Falcal space moderate. Juxta broadly U-shaped, arms 1/4 lodger than the whole aedeagus; body well sclerotized, transverse; lamina also transverse, much wider than deep. Valvae fusiform; costal angle moderate, obtuse to almost rounded; rear costa 1/2 as long as the fore costa; upper process digitate, spatulate and finely serrate at apex; ventral process of the reflex type, rounded. Female genitalia. Henia membranous to distally sclerotized in a trumpet like structure; epistigmal lobe inconspicuous to prominent; epistigmal part not protruding, whole or bilobate; sterigma in stigmal position, sub-orbicular to reduced or absent. Hypostema rather strongly sclerotized; hypostemal body sclerotized, elongate to almost as long as it is broad. Ductus bursae 1.5 times as long as the henia, slender. Corpus bursae 1/4–1/3 shorter than the henia; signa present to absent. Androconia: lamina narrowly elongate. The male and female genitalia of species otherwise included under *Polyommatus* (s. str.), *Lysandra*, *Plebicula Meleageria* and *Agrodiaetus*, are all very similar, apart from some minor detail (see Higgins, 1975. The classification of European butterflies, p. 154–155 Collins, 320 pp). Catalogue of Life considers all these names to represent separate genera, with the only exception of *Meleageria* which is sunk in the synonymy of *Polyommatus.* All these names remain otherwise available to designate as many subgenera.
089.044.1	Molecular dat by Talavera *et al.*, 2013 (Cladistics, 29: 166–192) suggest that among the 4 genus group names discussed in the previous note, *Lysandra* may be subjectively considered to represent a separate genus. A number of inter-subgeneric hybrids have been described between *Lysandra* and *Meleageria*, between *Meleageria* and *Agrodiaetus*, between *Polyommatus* and *Plebicula* and between *Polyommatus* and *Lysandra*. The genus *Polyommatus* includes in total about 165 species. Subdivided at subgenus level, species are: 25 (*Polyommatus*); 25 (*Plebicula*); 4 (*Meleageria*); 11 (*Lysandra*) and around 100 (*Agrodiaetus*).
089.044.3	Species recognised within the subgenus *Agrodiaetus* are in a state of continued revision. Keeping into account both differences in chromosome numbers and recognised mitochondrial lineages, they may be more than 100 (see Mensi *et al.* 1992. 8th European Congress of Lepidopterology: 19–20; Kandul *et al.*, 2004. Syst. Biol., 53 (2): 278–298; Lukhtanov *et al.*, 2005. Nature, 436: 385–389; Kandul *et al.*, 2007. Evolution, 546–559, etc.).

089.044.0.001.0	The name *Papilio icarius* was published by Esper in his Supplement to Theil 1, Boden B. The date of publication is therefore 1789 for both the text (p. 35) and the plate (Pl. 99). See Heppner (1981). This finding makes once again *Papilio icarius* the senior synonym to designate the species otherwise known as *P. amandus* Schneider, 1791. Should the latter name be deemed of preferable use, the only possible option would be to refer to the ICZN for ruling under the plenary power.
089.044.0.001.1	The name *Papilio amandus* was published by Schneider (1791) in a paper titled "Lappländische Schmetterlinge". This notwithstanding, the type locality is clearly stated as "Südliche Schweden" and is not, accordingly, in Lapland, as sometimes reported in the entomological literature.
089.044.0.002.0	Verity (1943. Farfalle diurne d'Italia, 2: 298–301) tentatively reported the occurrence in C. Italy (Gran Sasso) of "*Lysandra syriaca* Tutt." (*Agriades coridon* var. *syriaca* Tutt, 1910. Nat. Hist. Brit. Butts, 4 (3): 58). Specimens identified by this author as *Lysandra syriaca* ra. *italaglauca* Verity, 1939 (Lambillionea, 39 (12): 220), however, are natural hybrids between *Polyommatus coridon* and *P. bellargus* (de Lesse, 1969. Anns Soc. ent. Fr. (n. s.), 5 (2): 469–522).
089.044.0.003.2	Leigheb (1987. Boll. Mus. reg. Sci. nat. Torino, 5 (2): 449–Figs 1–2), has described specimens of a population from Seulo (Prov. Nuoro, Sardinia) as *Lysandra coridon* ssp. *gennargenti*. The enzyme electrophoresis work by Marchi *et al.* 1995 (Heredity, 77: 16–22) has demonstrated that the Sardinian populations are distinct from both those from Spain (*P. caelestissimus*), as well as from those from the Italian continent. The species-level separation of the Sardinian taxon has been confirmed by Jutzeler *et al.* (2003. Linn. belg., 19 (3): 109–118; (4): 149–161) on larval morphologies. Although some authors have contended that it is possible that the correct name to use for this taxon is *P. nufrellensis* (Schurian, 1976) (*Lysandra coridon nufrellensis* Schurian, 1976. Ent. Z., Frankf. a. M., 87 (3): 13, Pl. 1, Figs A, B ♂, C, D; LT Corsica: Nufrella [recte Mt La Mufrella]: 1900–2200 m), this suggestion remains, at the moment, unsupported. See also Sala *et al.* (2005. Linn. belg., 20 (4): 121–122); Schurian *et al.* (2006. Linn. belg., 20 (5): 180–192); Gamisans & Jutzeler (2012. Candollea, 66 (2) (2011): 273–280).
089.044.0.004.0	See note 089.001.0.007.0 as concerns the authorship and date of publication.
089.044.0.005.0	As concerns the authorship and date of publication of this name, see note 089.001.0.007.0.
089.044.0.005.1	The date of publication of *Papilio meleager* Esper, [1778] is that of Pl. 45, and not that of the accompanying text on p. 375, which appeared only in 1779 (see Heppner 1981).
089.044.0.006.0	*P. dolus* (s. str.) occurs, in Italy, only in a restricted number of sites of the Ligurian Alps. See de Lesse (1961. Alexanor, 2: 57–63; 283–286 for a study of chromosome number variation within this species group).
089.044.0.007.0	See note 089.001.0.007.0 as concerns the authorship and date of publication of this name.
089.044.0.008.1	For the time being, we will limit ourselves to note that the name *Papilio bramafama* de Prunner, 1798 would have nomenclatural priority over *Papilio eros* Ochsenheimer, [1808]. This synonymy was already observed by Gianelli (1890. Ann. R. Accad. Agricolt. Torino, 33: 18), Verity (1943 Farfalle diurne d'It., 2: 259, although with some doubt) and Rocca (1950. Boll. Soc. Ent. Ital., 80: 86). To promote nomenclatural stability, someone may submit an application to ICZN asking that de Prunner's name is suppressed under the plenary powers, together with the name *Papilio polidamas* de Prunner, 1798. It is to be noted, however, that both these names fall under the provision of Art. 23.9.1.1 and represent 'nomina oblita', since they have been used less than 25 times since 1999. They should, therefore, be overlooked.
089.044.0.010.0	*Polyommatus exuberans* is a narrowly endemic species only occurring in the Valley of Susa, in N.W. Italy and perhaps on the E. slopes of the S.E. French Alps. It differs from *P. ripartii* both in enzyme electrophoretic characters (Mensi *et al.* 1994) and in external morphology. Vila *et al.* (2010. Biol. J. Linn. Soc., 101: 130–154), on the basis of some DNA sequences, subjectively consider this taxon a synonym (subspecies?) of *P. ripartii*, even though the clade relative to the *P. ripartii* group of taxa that they obtained is mainly unresolved. Even more important is that specimens of the *P. ripartii* group of taxa were not adequately sampled from the geographical point of view and were apparently misidentified, at least in some cases.
089.044.0.011.0	*Polyommatus galloi* is a narrowly endemic species, restricted to the area of Mount Pollino and Mt Orsomarso, on the border between Lucania and Calabria, in the S. of Italy. Although it is considered a separate species in Fauna Europaea, PESI and Funet, it is treated as a synonym (subspecies?) of *Polyommatus ripartii* by Kudrna *et al.* (2012). Unfortunately enough, the clade relative to the *P. ripartii* group of taxa obtained by Vila *et al.* (2010. Biol. J. Linn. Soc., 101: 130–154) is mainly unresolved.

089.044.0.012.0	*Polyommatus hispanus* is a bivoltine taxon. Verity (1943. Farfalle diurne d'Italia, 2: 301) sunk this name as a synonym of *Polyommatus albicans* (H.S.) and listed *P. arragonensis* as yet another synonym. The first of these names (*Lycaena corydon* var. *albicans* Herrich-Schäffer, 1851. Syst. Bearb. Schmett. Europa, 6: 27, Figs 494 ♂, 495; LT: [Spain:] Andalusia), is now often considered to designate a separate monovoltine taxon. The other name (*Lycaena corydon* ab./var. *arragonensis* Gerhard, [1851]. Ver. Mon. europ. Schmett. Thecla, Polyommatus, Lycaena, Nemeobius, (1A), p. 17, no. 87 (as "Ab.", but "var." on p. [ii]. Pl. 32, Figs 1A, 1B ♂, 1C, 1D ♀; LT: Spain [Aragon] (by implication) may be subjectively used to designate a "subspecies" of *P. albicans*, even though it is locally bivoltine (see also Olivier A., 1999. Phegea, 27 (4): 127–140 as concerns the dates of publication of the various instalments of Gerhard's book).
089.044.0.013.0	*P. humedasae* is a narrowly endemic, xero-thermophilous species, restricted to a small segment of the Val d'Aosta region, in N.W. Italy. Its status as a fully separated species has been confirmed by Vila *et al.* (2010. Biol. J. Linn. Soc., 101: 130–154). Its larval development has been described by Manino *et al.* (1987. Boll. Mus. regionale Sci. nat. Torino, 5 (1): 97–101).
089.044.0.014.0	*P. icarus* was accidentally introduced into S.E. Canada.
089.044.0.015.0	*Polyommatus ripartii* (s. str.) occurs, in Italy, only at a restricted number of sites, in the Ligurian Alps. See de Lesse (1960. Revue fr. Ent., 27 (3): 240–263 for a study of chromosome number variation within this species group).
089.044.0.015.2	Vila *et al.* (2010. Biol. J. Linn. Soc., 101: 130–154) failed to find any difference between the DNA sequences obtained from specimens of this taxon and those of *P.* (*ripartii*?) *exuberans*. Unfortunately, specimens of taxa of the *P. ripartii* group were not adequately sampled and/or identified from a geographical point of view.
089.044.0.017.0	Rather unexpectedly, *Polyommatus virgilius* is much less strongly related to Turkish *P. menalcas* than to *Polyommatus dolus*, of which it may be subjectively considered a broadly allopatric "subspecies" (see Lukhtanov *et al.*, 2006. Insect Syst. Evol. 37: 325–334; Vila *et al.*, 2010. Biol. J. Linn. Soc., 101: 130–154).
089.044.0.018.0	*Lycaena celina* was considered for a long time as either a synonym or a "subspecies" of *Polyommatus icarus*. The morphometric and genetic analysis carried out by Dincă *et al.* (2011. Molecular Ecology, 20 (18): 3921–3935) have demonstrated that it represents a separate species occurring in the Maghreb, S. Spain, the Balearic Islands and Sardinia. At nomenclatural level, although the name "celina" is frequently used as a feminine personal name, it is clear from the original description that it was chosen with reference to the wings' colour of males.
089.045.0	See note 089.037.1 as concerns the publication date of this and other Kluk's names. The genus *Nymphalis* (s. str.) is Holarctic. It includes 4 species in the Palearctic Region, 2 of which (*N. antiopa* and *N. l-album*) occur also in North America, together with 2 strictly Nearctic species, one of which is Central American (see Nylin *et al.*, 2001. Zool. J. Linn. Soc.132: 441–468). See also note 089.046.0. The name *Papilio vaualbum* [Denis & Schiffermüller] 1775, frequently used for the Holarctic taxon otherwise known as *N. l-album* (Esper), is a Nomen Nudum (see Gillham 1956. Psyche 63 (1): 28; Koçak 1981. Priamus, 1 (2): 77, note 73; Kudrna & Belicek 2005. This species may or may not be strictly related to *Nymphalis* and is otherwise sometimes classified under *Roddia* (Korshunov, 1995. Dnevnye babochki Aziatskoi chasti Rossii. Spravochnik, p. 81. TS: *Papilio l-album* Esper, 1781. Die Schmett., 1 (2) (2): Pl. 62, Figs. 3a, 3b; text [1781] 1 (2) (4): 69. TL: "Ungarn & Oesterreich") or *Kaniska* (Moore, [1899] Lep. Ind. 4 (41): 91. TS: *Papilio canace* Linnaeus, 1763. Amoen. acad. 6:406. By original designation). See Nylin *et al.*, 2001. Zool. J. Linn. Soc.132: 441–468). Other classifications (ex. Funet, following Wahlberg *et al.* 2003 Molec. Phyl. Evol., 28: 473–484) subjectively sink *Polygonia*, *Inachis*, *Aglais*, *Kaniska* and *Roddia* within a single and broader genus *Nymphalis*. See also note 089.050.0 as concerns genitalic differences between these genus-group taxa.
089.045.0.001.0	*Nymphalis antiopa* is a Holarctic species occurring throughout Eurasia as well as in Canada, the USA and reaching as far South as the Venezuelan mountains. Some authors have stated that the type locality of this species was fixed by Fitch (1856. Trans. NY State agric. Soc., p. 485) as "USA". Actually no fixation of a type locality occurs in that paper for *P. antiopa* Linné, whereas *Vanessa lintnerii* (a subjective synonym of *P. antiopa*) is described on that page, from New York State: Schoharie.

089.046.0	On the basis of molecular data (see Wahlberg *et al.*, 2005. Biol. J. Linn. Soc., 86: 227–251; Wahlberg *et al.*, 2009. BMC Evolutionary Biology, 9: 92–108) and perhaps partially because the genus *Inachis* is monobasic, some authors have suggested that it be lumped with *Aglais* Dalman, 1816 (most European databases), or that *Nymphalis* include *Inachis* (Catalogue of Life), or even that they three of them (*Inachis, Aglais* and *Polygonia*) collapse under *Nymphalis* Kluk (Funet). Only the latter of these hypotheses, however, is fully compatible with other molecular and morphological data (Nylin *et al.*, 2001. Zool. J. Linn. Soc.132: 441–468), which were also derived from a much bigger dataset. Should the latter interpretation prevail, the names *Inachis, Polygonia* and *Aglais* could be retained to designate subgenera of *Nymphalis*, together with the Oriental (sub) genera *Kaniska* Moore, 1899 and *Roddia* Korshunov, 1995. Whatever it can be, at least *Inachis* and *Aglais* have strongly divergent genitalia: the subunci are strong and massive in *Inachis* and long and flexible in *Aglais*; the tegumen is wide and bilobate in *Inachis* and anteriorly pointed in *Aglais*; the saccus is short in *Inachis* and very long in *Aglais*, the aedeagus is thicker and shorter in *Inachis*, etc. (see also Higgins 1975: 176, 178). In the female genitalia of *Aglais*, the ductus bursae is longer and distally more completely sclerotized than in *Inachis*. A genus derived from their lumping would be structurally and morphologically undefinable. The date of publication of *Inachis* has been fixed by the ICZN in Op. 150 (Dir. 4).
089.047.0	The genus *Vanessa* occurs mainly in the New World. It includes 7 species in C. and S. America and 2 in N. America. One species (*Vanessa abyssinica*) is endemic to S. Ethiopia. Species occurring in the Palearctic are 5, one of which (*V. virginensis*) occasionally reaches the Atlantic coasts of this continent, and 1 is an endemic of the Canaries. The other 2 European species are wide ranging. The Indonesian area has a total of 3 species. Australia has 3 (comprised some rare *V. cardui* migrants in the North of the country) and New Zealand has 2 species. Finally 1 species (*Vanessa tameamea*) is a Hawaiian endemic. See also note 089.017, for nomenclature.
089.047.1	Some authors classify species of the *Vanessa cardui* complex in a separate genus (or subgenus) *Cynthia*.
089.047.1.001.0	*V. atalanta* is Holarctic and occurs as far South as Venezuela and the Dominican Republic. To the North it migrates as far as Iceland and occasionally reaches the Bermudas. It was introduced into the Hawaii and (unsuccessfully) into New Zealand.
089.047.1.002.0	*V. cardui* is a very active migrant (see for instance Stefanescu *et al.*, 2013. Ecography 36: 474–486). It occurs all over the World and can reach Australia, although rarely, where its vicariant species, *V. kershawi*, is also present.
089.048.0	The genus *Araschnia* is entirely Palearctic and includes 6 species, 5 of which in the East Palearctic. The date of publication was fixed by the ICZN in Op. 150 (Dir. 4). The phylogeny of the genus *Araschnia* was investigated by Fric *et al.* (2004. J. evol. Biol., 17: 265–278).
089.048.0.001.0	*A. levana* was thought to have become extinct in Italy around 1935, for unclear reasons. More recently, however, it was re-discovered in the Tarvisio and Oberhörl area, not far from the Austrian and Slovenian borders.
089.049.0	*Aglais* is considered a separate genus, (sometimes to include *Inachis*) by all European databases, with the only exception of Funet, which lumps it with *Nymphalis*. *Aglais* (s. str.) is Holarctic. It includes 1 Nearctic species (*A. milberti* rather divergent from the rest of the group) and 6 Palearctic species. See also note 089.046.0
089.049.0.001.0	*A. ichnusa* may be subjectively considered an allopatric "subspecies" of *Aglais urticae*. It may be worth observing, however, that the latter remains morphologically unchanged all across its range, from Portugal to Kamchatka, whereas it would assume clearly different morphology on Sardinia and Corsica only. *A. ichnusa* is considered a separate species in Fauna europaea, PESI, Funet, but not in Catalogue of Life, where it is deemed a synonym of *Aglais urticae*
089.050.0	*Polygonia* is considered a separate genus in most databases (Fauna Europaea, Catalogue of Life, PESI) as well as in the Catalogue of the Butterflies of the United states and Canada (Pelham, 2012. see http://butterfliesofamerica.com/US-Can-Cat.htm), but is lumped with *Nymphalis* in Funet and by Kudrna *et al.* (2011). Genitalia, however, are very strongly divergent: the subunci are fused to form a quadrangular gutter-shaped plate, in *Nymphalis*, whereas they are separate, very large and pincer-shaped in *Polygonia*; valvae are sinuous, with strong and downturned terminal process, in the former, and simple, without a terminal process, in the latter genus (see also Higgins 1975: 174, 179). In female genitalia, the subvaginal plate is either whole, or broadly notched, in *Polygonia* and cleft in *Nymphalis.* The "genus" derived from their lumping would be morphologically and structurally indefinable. *Polygonia* (s. str.) is Holarctic. It includes 9 Nearctic and 8 Palearctic species (see Wahlberg *et al.*, 2009. BMC Evolutionary Biology, 9: 92–108). The date of publication of this name was fixed by the ICZN in Op. 150 (Dir. 4). See also note 089.046.0.

089.050.0.001.0	As concerns the spelling of this and other hyphenated names, see Art. 32.5.2.4.3 ICZN which states that "If the first element is a Latin letter used to denote descriptively a character of the taxon, it must be retained and connected to the remainder of the name by a hyphen"
089.051.0	The genus *Argynnis* includes 24 Palearctic species in total, but it may well be extended to include also the 16 Nearctic species generally classified under *Speyeria* (see Hovanitz, 1962. J. Res. Lepid., 1 (1): 95–96). Other authors consider *Pandoriana*, *Mesoacidalia* (sometimes as near to, or a synonym of *Speyeria*) and *Fabriciana* (as well as the mainly Asiatic *Argyreus* [also in Ethiopia], *Childrenia*, *Damora* and *Nephargynnis*) as separate Genera or subgenera (see Simonsen 2006. Zoologica Scripta, 35 (3): 231–241; Simonsen 2006. Biol. J. Linn. Soc., 89: 627–673; Simonsen 2007. Zool. Anz., 246: 1–10). See also to the note 089.017.1 and 089.051.2 for other nomenclatural issues.
089.051.1	*Fabriciana* is generally considered a subgenus of *Argynnis* (Fauna Europaea, PESI etc.), but is treated as a separate genus in Catalogue of Life and in Funet. See Warren (1944. Trans. R. ent. Soc. London, 94: 1–101, 46 pls) and Simonsen (2006. Biol. J. Linn. Soc., 89: 627–673) for a detailed description of genitalia. See also to the note 089.051.0.
089.051.2	*Mesoacidalia* is often subjectively treated as a subgenus of *Argynnis*, but sometimes even as a separate genus, or sunk in the synonymy of American *Speyeria*. The latter treatment is followed in Funet, Catalogue of Life and by most American lepidopterists (see Pelham 2012 at http://butterfliesofamerica.com/US-Can-Cat.htm). Catalogue of Life, however, lists 2 Asiatic species (*Argynnis clara* and *Argynnis vitaha*) as belonging to a separate genus *Mesoacidalia*. This is nomenclaturally incorrect, since the type species of *Mesoacidalia* is *Papilio aglaja* Linné, which this database classifies under *Speyeria*. See Warren (1944. Trans. R. ent. Soc. London, 94: 1–101, 46 pls) and Simonsen (2006. Biol. J. Linn. Soc., 89: 627–673) for a detailed description of the genitalia). See also to the note 089.051.0.
089.051.3	*Pandoriana* is subjectively a monobasic subgenus of *Argynnis*, but is sometimes treated as a separate genus (See Warren, 1944. Trans. R. ent. Soc. London, 94: 1–101, 46 pls). See also to the note 089.051.0.
089.051.4	See note 089.051.2 as concerns the use of the name *Speyeria*.
089.051.5	See note 089.017.4
089.051.0.002.0	See note 089.001.0.007.0 as concerns the authorship and publication date of this name.
089.051.0.002.0	Subjectively, the name *Papilio aglaja* Linné, 1758 (Syst. Nat (ed. x), 1: 481, no. 140) would have been a primary homonym of *Papilio aglaja* Linné, 1758 (Syst. Nat. (ed. x), 1: 465, no. 44, TL: "Habitat in Asia"). Since the Code does not recognise any page or line priority within the same book, provided that it was published as a single part, the ICZN (Op. 974) declared the latter name (currently *Delias pasithoe*) a junior primary homonym of the former. This name is sometimes misspelled as "aglaia" (ex. Catalogue of Life).
089.051.0.003.0	*Argynnis elisa* is threatened in Europe and is included in the Annex IV of the Habitats Directive, which forbids "all forms of deliberate capture or killing of specimens … in the wild", as well as "the keeping, transport and sale or exchange, and offering for sale or exchange, of specimens taken from the wild, except for those taken legally before this Directive was implemented". This taxon is mistakenly treated as an allopatric subspecies of *A. (F.) niobe* in Catalogue of Life. The larval development has been described by Jutzeler *et al.* (1997. Linn. belg., 16 (2): 63–69).
089.051.0.003.1 and 089.051.0.003.2	The description of *Papilio cyrene* Hübner, [1824] was based on materials, already labelled with that name, which the author had received from F. A. Bonelli (see Balletto & Passerin d'Entrèves, 1986. Boll. Mus. regionale Sci. nat. Torino, 4 (1): 129–146. At that time, Bonelli had already published the name *Argynnis cyrene* in Desmarest, 1825 (Bull. Sci. nat. Géol., (2) 4: 249), but only as an un-latinised Nomen Nudum (« L'*Argynnis Cyrene* Bon., sp. nov., ressamblant aux Argynnes Niobé et Aglaja »).
089.051.0.005.0	See note 089.001.0.007.0 as concerns the authorship and publication date of this name.
089.052.0	The genus *Issoria* includes around 7 species in the Palearctic and 3 in sub-Saharan Africa (*I. hanningtoni*, *I. smaragdifera*, *I. baumanni.* See Ackery *et al.* 1995. Carcasson's African Butterflies. The Natural History Museum, London). The genus *Yramea* (about 6 temperate Neotropical species: see Lamas, 2004. Atlas of Neotropical Lepidoptera. Checklist: 4A. Scientific Publishers, Gainsville, Florida.), is sometimes considered strictly related to, or congeneric with *Issoria* (Catalogue of Life). However, the molecular data by Simonsen (2006. Biol. J. Linn. Soc., 89: 627–673; Simonsen *et al.*, 2006. Insect Syst. Evol., 37 (4): 405–418; Simonsen, 2006. Eur. J. Entomol, 103: 425–432) have shown that *Yramea* is instead a member of the clade that includes *Boloria*. The date of publication of the genus group name *Issoria* has been fixed by the ICZN in Op. 150 (and Dir. 4).

089.053.0	The genus *Brenthis* includes 4 species and is exclusively Palearctic. Its date of publication was fixed by the ICZN in Op. 150 (Dir. 4).
089.053.0.002.0	See note 089.001.0.007.0 as concerns the authorship and publication date of this name.
089.054.0	The genus *Boloria* includes a total of 38 Palearctic and 5 exclusively Nearctic species. 9 species are in common between N. America and the Palearctic. Species classified in the subgenus *Boloria* (s. str.) are 13 (or 14), and are all Palearctic, apart from *B. alaskensis*, which occurs on both sides of the Bering Strait (see Simonsen, 2005. Syst. Ent., 30: 653–665; Tuzov & Bozano, 2006. In Bozano (ed,) Guide to the butterflies of the Palearctic Region, Nymphalidae, Pt. 2, Omnes Artes, 72 pp).
089.054.1	The genus group name *Clossiana* may be subjectively deemed to represent either a subgenus of *Boloria*, or a separate genus. Its male genitalia mainly differ from those of *Boloria* in having valvae with a digitate ventral process. Female genitalia have slightly shorter and thicker ductus bursae than *Boloria.* American authors currently classify *Clossiana* as a subgenus of *Boloria* (see Pelham 2012 http://butterfliesofamerica.com/US-Can-Cat.htm). The same treatment is followed in Fauna europaea and PESI, while in Catalogue of Life and Funet it figures as a separate genus. Both interpretations are compatible with results obtained from molecular and morphological studies by Simonsen (2006. Biol. J. Linn. Soc., 89: 627–673) and Simonsen *et al.* (2006. Insect Syst. Evol., 37 (4): 405–418). *Clossiana* includes 28 Palearctic or Holarctic species. See Warren (1944. Trans. R. ent. Soc. London, 94: 1–101, 46 pls) and Simonsen (2006. Biol. J. Linn. Soc., 89: 627–673) for a detailed description of the genitalia). See also note 089.054.0.
089.054.2	The name *Proclossiana* may be subjectively considered to designate a subgenus of *Boloria* (Fauna europaea, PESI), Butterflies of America (see Pelham 2012 http://butterfliesofamerica.com/US-Can-Cat.htm), or even a distinct genus (Catalogue of life, Funet). The male genitalia are very similar to those of *Boloria*, whereas female genitalia differ in having extremely short ductus bursae and are more similar to those of *Clossiana.* Whenever deemed a distinct taxon, *Proclossiana* would include only one species, having Holarctic distribution.
089.054.0.002.0	*Boloria eunomia* is a Holarctic species, very marginally entering the Italian political territory at one site only, in the C. Alps.
089.054.0.002.1	Catalogue of Life lists *Proclossiana aphirape* Hübner, 1793 [sic!] as the valid name for the taxon otherwise known as *Boloria eunomia*. As demonstrated by Hemming (1937), this name was only published between 24th Dec. 1799 and 18th Apr.1800 and takes, therefore, the most recent of these dates. This mistake probably derives from the otherwise almost invariably correct "card index" of the Natural History Museum (Entomology). See at http://www.nhm.ac.uk/research-curation/research/projects/lepindex/search/index.dsml?
089.054.0.003.0	This name is sometimes misspelled as "euphrosine"
089.054.0.004.0	*Boloria graeca* is restricted to a very small area of the W. and S.W. Alps, both on the French and the Italian slopes. Elsewhere it is only found in the Balkans and has, therefore, broadly disjunct distribution.
089.054.0.006.0	Tuzov & Bozano (2006. In Bozano (ed.), Guide to the butterflies of the Palearctic Region, Nymphalidae part II: Tribe Argynnini, Omnes Artes, p. 11) suggest that the taxon occurring in the Pyrenees and Cantabria may represent a separate species (*B.*[*oloria*] *pales pyrenesmiscens* Warren 1944. Trans R. ent. Soc. Lond., 94: 79. TL: [France:] Hautes Pyrénées: Gèdre; validation of *Boloria pales* ra. *pyrenesmiscens* Verity, 1932. Dt. ent. Z. Iris, 46: 102, 109. Since the latter name was published after 1931 and was not accompanied by a description, a definition, or an indication, it is invalid with this authorship and date (Art. 12.1), because provisions Art. 12.2 ICZN cannot be applied in this case (see Art. 12.3). Verity (1950. Farfalle diurne d'Italia, 4: 219, 220) had observed that populations from the S.W. Alps (and even some specimens from the Abruzzi), are morphologically intermediate between those from the rest of the Alps and those from the Pyrenees. See note 089.001.0.007.0 as to the authorship and publication date of Schiffermüller's names.
089.054.0.007.0	See note 089.001.0.007.0 as concerns the authorship and publication date of this name.
089.054.0.009.0	The name *Papilio titania* was published on page 54 of Esper's "Schmetterlinge…" Suppl. Theil 1, Boden H (1789), whereas the accompanying Plate 103 was published only in 1794 (see Heppner 1981).

089.055.0	Although it is related to the American *Phyciodes* group, the genus *Melitaea* is entirely Palearctic and includes a total of 73 species. Of these, 23 are often classified in the genus or subgenus *Melitaea* and the rest in *Mellicta* (see Higgins, 1941. Trans. R. ent. Soc. London, 91: 175–365; Higgins, 1981. Bull. Br. Mus. (N.H.), Entomology, 43 (3): 77–243). Results of an electrophoretic study of 19 enzymatic proteins conducted by Zimmermann *et al.* (1999. C.r. Acad. Sci. Paris, Sci. Vie, 322: 429–439) are not incompatible with a separation between a *Melitaea* clade and a *Mellicta* clade, within a broader *Melitaea* clade. Results of the molecular study by Leneveu *et al.* (2009. Biol. J. Linn. Soc., 97, 346–361), however, point to a very different solution, since the supported subgenera would still be 2, but the separation would be, in this case, between *Melitaea* (including *Mellicta*) and *Didymaeformia* (including *Cinclidia*). As concerns European databases, Funet and Catalogue of Life separate *Mellicta* and *Melitaea* into distinct genera, whereas Fauna Europaea and PESI consider a single genus *Melitaea.* See to the note 089.017.1 for some purely nomenclatural issues.
089.055.1	Verity (1950. Farfalle diurne d'Italia, 4: 89, 90, 157) was apparently unaware that Moore ([1901], Lep. Ind., 5 (49): 2) had selected *Papilio athalia* Rottemburg, 1775 (Der Naturforscher, Halle, 6: 5, no. 19 (2)), as Type Species for the genus group name *Mellicta* Billberg. Like most authors of his times, Verity thought that the type species of *Mellicta* was *Papilio cinxia* Linné, 1758 (by [invalid] selection by Barnes & McDunnough 1916. Contr. nat. Hist. Lepid N. Amer., 3 (2): 83). As a consequence, *Mellicta* was, in those times, deemed an objective synonym of *Melitaea* (see Verity, 1950. Farfalle diurne d'Italia, 4: 59). Higgins (1955. Trans. R. ent. Soc. Lond., 106: 4) was the first author to re-discover Moore's type selection.
089.055.2	The subgenus *Mellicta* (sometimes considered a separate genus, see Higgins, 1955. Trans. R. ent. Soc. Lond., 106: 1–131) includes 13 species.
089.055.3	The subgenus *Cinclidia*, whenever deemed taxonomically valid, would include 6 species.
089.055.4	The subgenus *Didymaeformia* would include 31 Palearctic species, plus one, *M. abyssinica*, from the C. Ethiopian mountains. It is not impossible, however, that the latter is a synonym or a "subspecies" of *M. deserticola*.
089.055.0.001.0	*Melitaea aetherie* occurs, in Italy, only in Sicily and in Calabria, where it occupies a restricted number of sites (Scalercio, 1994. Ricerche faunistico-ecologiche sulla ropalocerofauna di alcuni ambienti calabresi. 129 pp. Thesis, Univ. of Calabria,). Its larval development has been described by Jutzeler *et al.* (2004. Linn. belg., 19 (9): 361–374).
089.055.0.002.0	*Melitaea asteria* is a high altitude species, occurring in Italy only in the E. Alps, at a very restricted number of sites.
089.055.0.003.0	It has long been known that *Melitaea athalia* and *M. nevadensis* (often referred to as *M. celadussa*) are separate taxa. Their male genitalia, however, demonstrate that they form a 20–100 miles broad hybridisation area, spanning roghly West to East, across France, Switzerland and N.E. Italy (Higgins 1932. Entomologist, 65: 217). *M. athalia* inhabits areas north of this belt, while *M. nevadensis* occurs in C.S. France and most of Italy. Extensive DNA sequencing by Leneveu *et al.* (2009. Biol. J. Linn. Soc., 97: 346–361) have demonstrated that *M. nevadensis* is not, as previously expected, sister taxon to *M. athalia*, The latter taxon, in fact, is genetically closer to some Asiatic species such as *M. ambigua* (ranging from the Altai to Japan) than it is to *M. nevadensis*. We are faced therefore, with the alternative of either considering a paraphyletic *Melitaea athalia* (s. l.), or two separate species (i.e. *M. athalia* and *M. nevadensis*), many specimens of which, having hybrid origin, cannot be assigned to any of the two. As concerns Italy, *M. athalia* (s. str.) occupies only the extreme N.E. (i.e. E. Trentino-Alto Adige, E. Veneto and Friaul), while only *M. nevadensis* is found in the rest of the country. The Italian hybridization area is about 80 km broad and extends along the Resia (Reschsen) Pass to Venice line.
089.055.0.003.a	The name *M. nevadensis* was originally proposed to designate what was considered a "forma geographica" of *Melitaea deione.* This misidentification was corrected by Oberthür in the same year (1904. Études Lép. comp., 1: 251). The type materials have been figured by Oberthür (1910. Études Lép. comp., 4, Pl. 45, figs 355–358, as *Melitaea nevadensis*). Kudrna *et al.* (2011: 310) were the first authors to use this name to designate this taxon in modern times.
089.055.0.003.2	The name *Melitaea athalia* var. *helvetica* Rühl, 1888 would represent the most senior available name to designate what is currently known as *Melitaea nevadensis*. As Lionel Higgins (1955. Trans. ent. Soc Lond., 106: 111) has shown, however, this name cannot be used, since specimens from its type locality are *M. athalia / M. nevadensis* hybrids. (See Art. 17.2 and 23.8 ICZN).
089.055.0.005.0	*Melitaea britomartis* was historically present in many parts of the northern Padano plains and of the Italian pre-Alps, but has become extinct all over the N.W. of Italy in 1960–1980 and is currently surviving at a few sites in Friaul and Venezia Giulia.

089.055.0.010.0	Several authors maintain that *Papilio trivia* [Denis & Schiffermüller], 1775 is a Nomen Nudum, since it was accompanied only by a very sketchy and highly generic description. These authors prefer, therefore, to identify this species by Esper's [1783] name *Papilio fascelis*. The name *Papilio trivia* is deemed nomenclaturally valid by Kudrna & Belicek (2005: 26). See note 089.001.0.007.0 as concerns the authorship and publication date of this name.
089.055.0.011.0	A "lapsus calami" by Higgins (1955. Trans. ent. Soc. Lond., 106: 88), has unfortunately created some nomenclatural confusion about this species, by suggesting that Keferstein's name (*Melitaea parthenoides*) was originally proposed as a replacement name (Nomen Sobstitutum) for *Argynnis parthenie* Godart, 1819 (correct) nec *Papilio parthenie* Bergsträsser, 1780 (mistaken). In fact, since these two names were originally published under different genera, they are not primary homonyms. On the other hand, they cannot be reasonably expected to ever become secondary homonyms, since they are currently considered a species of *Melitaea* (i.e. *M. parthenoides*, the first) and a species of *Brenthis* (i.e. *B. ino*, the second). Actually, and in synthesis, Higgins meant "nec Borkhausen, 1788" (currently *Melitaea aurelia*). *Melitaea parthenoides* Keferstein remains the valid name for identifying this species, as correctly observed by Higgins, although for a different reason.
089.055.0.011.0	To avoid future possible confusion with *Melitaea ornata* (=*telona*: see note 089.055.0.014.0) and since no syntypes of *Papilio phoebe* are available (Schiffermüller's collection was lost in a fire in 1848), Tennent & Russell (2010. Entomologist's Gaz., 61 (3): 147–153, Figs 1–6) designated a Neotype of *Papilio phoebe* from its original type locality (Vienna).
089.055.0.013.0	Several authors have credited the name *Melitaea varia* to Herrich-Schäffer, and not to Meyer-Dür. This derived from an error in the dates of publication of these authors' works. Higgins (1955. Trans. ent. Soc. Lond., 106: 92) was first to observe that the date of publication of *Melitaea varia* Meyer-Dür (N. Denk. allg. schweiz. Ges., vol. 12) is November 1851. Herrich-Schäffer in contrast, has published the name *Melitaea athalia* var. *varia* only in the Index of volume 1 of "Systematische Bearbeitung der Schmetterlinge von Europa", where he provides a name for the specimens depicted on Pl. 57, Figs 270–274. This Plate was published in 1845 (Heft. 10), but has no nomenclatural validity since its caption is "*Melitaea athalia* var." [sic!]. The date of publication of *Melitaea varia* Herrich-Schäffer, is therefore that of p. 4 of the Index ("Rhopalocera-Tagfalter"), which appeared only in 1854 (Heft. 65) (see Hemming, 1937. Hübner. A bibliographical and systematic account of the entomological works of Jacob Hübner, 1: 580, 585).
089.055.0.014.0	van Oorschot (in Hesselbarth, van Oorschot & Wagener, 1995. Die Tagfalter der Türkei, 2: 1030) was the first modern authors to suggest that *Melitaea phoebe* represents more than one species. These authors separated *Melitaea punica* Oberthür, 1876 (*Melitaea phoebe punica*, Etudes Ent., 1: 25 LT: Algeria: Lambessa) as a separate semi-species and *M. phoebe telona* Fruhstorfer, 1908 as a "subspecies" of that taxon. Later molecular studies (Leneveu et al, 2009. Biol. J. Linn. Soc., 97: 346–361) have shown that whereas the real (North African) *M. punica* is relatively nearer to *M. phoebe*, "*M. telona*" is rather sharply separated from it. In the meantime, biological studies demonstrated that the so-called *Melitaea phoebe* "ssp. *emipunica* Verity" (from Sicily) is monovoltine (its 4th instar larvae enter diapause in mid July and start eating again in mid February). Furthermore, starting from the 4th instar, their head capsule assumes a bright orange-red colour, and is never black (Russell et al 2005. Entomologist's Gaz., 56: 67–70). Similar results were obtained in the Balkans by Varga *et al.* (2005. In Kühn, E., Feldmann, R., Thomas, J. & Settele, J. (Eds), Studies on the Ecology and Conservation of Butterflies in Europe 1: general concepts and case studies, pp. 65–88), in Hungary.
089.055.0.014.0	Tóth & Varga (2011. Zool. Anz., 250: 258–268) have shown that the genitalia of *M. telona* are similar to those of *M. ornata*, so that the two taxa are preliminarily considered conspecific, although in the absence of molecular confirmation.
089.055.0.014.1	The molecular studies by Leneveu *et al.* (2009. Biol. J. Linn. Soc., 97: 346–361) have confirmed the species rank distinction of *M. telona* [currently *M. ornata*] only as concerns the Palestinian population, but failed to prove its monophyly with the Sicilian population (see Russel *et al.*, 2007. Entomologist's Gaz., 58: 137–156), thereby suggesting that the latter may have had hybrid origin. The Sicilian taxon, however, shares many characters with the Hungarian population, such as its ecological requirements (xerophyly), monovoltinism (only one generation, in Spring), and characters of larval morphology. Another population has been recorded from the Var (S. France: Russell et al 2005), while Russell & Pateman (2011. Entomologist's Gaz., 62 (1): 7–31) have found it in several areas of S. Italy. It is not impossible, therefore, that more populations will be eventually identified also in other parts of the Country, perhaps occurring in cohabitation with *M. phoebe*.

089.055.0.014.2	Varga *et al.* (2005) made reference to the name *Melitaea phoebe ogygia* Fruhstorfer, a trinomial published in the same paper (and page) as *Melitaea phoebe telona*. Even though Varga *et al.* might have claimed a First Reviser state (Art. 24.2. ICZN), they themselves have agreed to use the name *Melitaea telona* Fruhstorfer, as suggested by Russell *et al.* (2007. Entomologist's Gaz., 58: 137–156). The latter name, in fact, was more apt to guarantee nomenclatural stability, since its type locality is "Jerusalem", i.e. from an area where only one species of the *M. phoebe* complex, is found. In the Peloponnesus (type locality of "*M. ogygia*"), in contrast, both species are likely to occur.
089.055.0.014.3	In case *Melitaea ornata* were not confirmed to be conspecific with *M. telona* by molecular investigations, this name would perhaps represent the most senior synonym available to designate this species.
089.055.0.014.4	Stauder (1914) described *Melitaea phoebe* ab. *totila* as an aberration ("Ich benenne diese Aberration Forma *totila*, ab. nov.) so that the name "totila", despite having being considered at subspecies rank by Tóth & Varga (2011. Zool. Anz., 250: 264), has no nomenclatural status, at least with its original authorship and date.
089.056.0	The Holarctic genus *Euphydryas* includes a total of 12 Palearctic species, plus another 6 in the Nearctic. Whenever subdivided into separate genera or subgenera, *Euphydryas* (s. str.) would include a single North American species, *E. phaeton*.
089.056.1	The name *Eurodryas* may be subjectively used to designate the 7 Palearctic species of the *E. aurinia* group, either at genus (Catalogue of Life), or subgenus level (see Zimmermann *et al.*, 1999. C.r. Acad. Sci. Paris, 322: 429–439).
089.056.2	The name *Hypodryas* may be subjectively used to designate 4 Palearctic (*E. cynthia*, *E. iduna*, *E. maturna* and *E. intermedia*) and 1 North American species (*E. gilletti*), at either genus (Catalogue of Life), or subgenus level. See also Zimmermann *et al.* (1999. C.r. Acad. Sci. Paris, 322: 429–439).
089.056.0.001.0	*E. aurinia* is threatened in Europe. It is included in the Annexes II and IV of the Habitats Directive, which forbid "all forms of deliberate capture or killing of specimens … in the wild", as well as "the keeping, transport and sale or exchange, and offering for sale or exchange, of specimens taken from the wild, except for those taken legally before this Directive was implemented". ICZN Op. 516 states that *Papilio aurinia* Rottemburg, 1775 has nomenclatural precedence over *Papilio artemis* [Denis & Schiffermüller], 1775 (see note 089.066.0.006.0).
089.056.0.002.1	See note 089.001.0.007.0 as concerns the authorship and publication date of this name, as well as note 089.056.0.005.0.
089.056.0.003.0	*Euphydryas glaciegenita* may be subjectively considered an allopatric "subspecies" of *Euphydryas aurinia*, having a different larval food plant (generally *Gentiana kochiana* rather than *Succisa pratensis* or *Knautia arvensis*) and living in a quite different habitat type (high altitude alpine heaths, rather than in the wet grasslands of the Padano plains). See Zimmermann *et al.* (1999. C.r. Acad. Sci. Paris, 322: 429–439). The name *Melitaea arthemis debilis* Oberthür, 1909 (Etudes de Lépidoptérologie comparée, 3 (6): 228) designates another taxon, and might be deemed invalid as infra-subspecific, since the Author states: « La Merope des Pyrénées-Orientales, des Basses-Alpes et de la forêt de Rennes est distinguée par moi sous le nom de debilis. La debilis ne paraît pas rare à Rennes, où elle vole en compagnie des Artémis normales. »The type locality of *Melitaea arthemis debilis* is restricted to the Pyrénées Orientale
089.056.0.004.0	All over the European range of this taxon, and at least as far East as C. Liguria (Alps and Apennine), adults are clearly different from those of *E. aurinia*, larvae feed on *Cephalaria leucantha* or *Knauthia arvensis* (never on *Succisa pratensis* even where available), live in a different habitat (Mediterranean or sub-Mediterranean hills, rather than in the Padano plains) and congregate in bigger communal nests than those of *E. aurinia*. Populations occurring in the central and southern Apennines need further investigation. An important issue is that, in contrast to *E. aurinia* (s. str), *E. provincialis* is not threatened in Italy. Lumping the 2 taxa together would de facto risk to nullify all efforts to conserve "real" *E. aurinia* in the Padano plains. Separating this taxon from *E. aurinia* at species rank, however, is subjective (see Zimmermann *et al.*, 1999 (C.r. Acad. Sci. Paris, 322: 429–439).
089.056.0.005.0	Verity (1950. Farfalle diurne d'Italia, 4: 84), following several other authors, used for this species the binomen *Euphydryas ichnea*. As observed by Higgins (1950. Trans, R. ent. Soc. Lond., (12): 450), the type locality established for this species by Boisduval (Lapland and N. Siberia) does not correspond to what is known of its range (it might refer to *Euphydryas iduna*), whereas the figure (which depicts the name-bearing Holotype) shows an Austrian female of *Euphydryas cynthia* (which neither occurs in Lapland, nor in Siberia). From the nomenclatural standpoint, however, the name *E. ichnea* (Boisduval) should be listed as a synonym of *E. cynthia.*

089.056.0.006.0	*E. maturna* is threatened in Europe. It is included in the Annexes II and IV of the Habitats Directive, which forbid "all forms of deliberate capture or killing of specimens … in the wild", as well as "the keeping, transport and sale or exchange, and offering for sale or exchange, of specimens taken from the wild, except for those taken legally before this Directive was implemented". The last author to report this species from N.W. Italy was Rocci (1911. Atti Soc. ligust. Sci. nat. geogr., 22: 153–220) and everyone thought that he referred to misidentified specimens. *E. maturna* was finally found again by Gallo & Gianti (2003. Doriana 8 (335): 1–8), roughly in the same general area (S.W. Alps). See Dolek *et al.* (2013. J. Ins. Convn, 17 (2): 357–366) for a description of the biology of this species in Italy and elsewhere.
089.057.0	The Pan-Paleotropical genus *Charaxes* occurs mainly in the Afrotropical Region (see Henning [1989] The Charaxinae butterflies of Africa. 457 pp. Aloe Books, Johannesburg). In the Palearctic it includes only 4 species, while another 5 either reach it marginally, or arrest their distribution in N.E. India and or N. Myanmar. A dozen of other species have fully Oriental distribution. The Afrotropical species are 167 (Ackery *et al.* 1995. Carcasson's African Butterflies. The Natural History Museum, London).
089.057.0.001.0	Giorna (1791. Calendario entomologico, p. 99–101) was probably the first author to describe the larval development of *C. jasius*, on the basis of specimens collected at Nice in 1788.
089.058.0	The genus *Apatura* (s. l.) includes over 150 species occurring in the Palearctic and the Indo-Australian Regions. Of these species, often subdivided into several subgenera, or separate Genera, depending on the authors, 21 are at least partially Palearctic. Species of the subgenus *Apatura* (or *Apatura* s. str.) are only 9, all Palearctic. The name *Apatura* Fabricius was originally a junior homonym of *Apatura* [Illiger], 1807 (Allgem. Lit. Ztg., Halle (Jena), 1807 no. 2: 1181). The latter name, however, was suppressed under the plenary power for the purposes of both the Principle of Priority and the Principle of Homonymy, by Op. 232 ICZN. Contextually, the name *Apatura* Fabricius was conserved under the plenary power (Op. 232, Op. 264 ICZN). See to the note 089.017.1 for some other nomenclatural issues.
089.058.0.001.0	See note 089.001.0.007.0 as concerns the authorship and publication date of this name.
089.059.0	The genus *Limenitis*, often split into several subgenera, or distinct Genera, occurs all across the Palearctic and the Indo-Australian Regions (See Chermock 1950. Amer. Midl. Nat., 43 (3): 513–569). The genus (or subgenus) *Limenitis* (s. str.) includes about 24 species in total, 18 of which occur in the Palearctic Region, 2 are Oriental and 4 are North American. Some of the Palearctic and Oriental species generally classified in the genus *Athyma* are probably to be moved to *Limenitis*. See to the note 089.017.1 for some nomenclatural issues.
089.059.1	*Ladoga* is a subjective synonym of *Limenitis*.
089.059.2	The name *Litinga*, sometimes (erroneously) used for *Limenitis camilla* and *L. reducta*, was originally created to separate a group of 2 species from S. Siberia and the North of China, for which it is sometimes used at genus (Funet), or subgenus level.
089.059.0.001.1	Although Linné originally wrote this name "sibilla" a number of later authors corrected it into "sibylla", which would actually represent its correct Latin spelling. Art. 32.5.1.1. ICZN (see also the examples cited therein), however, does not allow for this type of corrections.
089.059.0.002.0	In his original description, Linné made reference, as it was usual for him, to the authors who had described the same species in former times, although without naming it binomially. The first cited author, listed by date of publication, is Ray (1710. Historia insectorum, p.127, no.3). Ray's type locality (Essex: Tolesbury), however, is probably mistaken, since this species is not known to have ever occurred in England. Uddman (1753. Novae insectorum species, p. 28, no.56, Fig. 5, TL: Finland: Mountains of Tavastia) comes second in the line and Clerck (1753. Acta Stockholmiae, p. 278, Pl. 7) is third. Since the ICZN recognises no other priority to names published on the same date, on can reasonably argue that the same rule applies to type localities, so that Verity's restriction to Sweden may be deemed valid unless, may be, Uddman's paper were demonstrated to have been published before Clerck's and even though both papers are nomenclaturally invalid (pre Linnean).
089.059.0.003.0	The species currently known as *Limenitis reducta* had a rather strange nomenclatural history, during which it was identified with a whole series of junior primary homonyms of other names. Most of these homonyms, however, had been created, in fact, to designate what is currently *Limenitis camilla* or *Neptis rivularis* and this species apparently remained unnamed. The oldest available name to identify this species, would have been *Limenitis anonyma* Lewis, 1872, but at the time when this was "discovered" by Bernardi (1947. Misc. ent., 44: 81; see also Verity, 1950. Farfalle diurne d'Italia, 4: 50) the name *Limenitis reducta* Staudinger, 1901 was already widely used in the European literature. As a consequence, the ICZN (Op. 562) suppressed Lewis' name under the plenary power for the purposes of the Principle of Priority but not for those of the Principle of Homonymy, to ensure nomenclatural stability.

089.060.0	The genus *Neptis* has an essentially Pan-Paleotropical range, with an important Palearctic radiation. Its Afrotropical species are 63 (Ackery *et al.* 1995. Carcasson's African Butterflies. The Natural History Museum, London); those exclusively Indo-Australian are 25; those occurring in the Palearctic Region (often radiating into or from the Oriental Region), are 57 (see Eliot, 1969. Bull. Br. Mus. (N.H.), Entomology, Suppl. 15: 1–155, 3 pls; Bozano, 2008. In Bozano (ed.), Guide to the butterflies of the Palearctic Region, Nymphalidae pt 3, Subfamily Limenitiinae, Tribe Neptini, Omnes Artes, 77 pp.). The name *Neptis* Fabricius was in origin a junior homonym of *Neptis* [Illiger], 1807 (Allgem. Lit. Ztg., Halle (Jena), 1807 (no.. 2): 1180. The latter name was suppressed under the plenary power for the purposes of both the Principle of Priority and the Principle of Homonymy, by Op. 232 ICZN. Contextually, the name *Neptis* Fabricius, 1807 was conserved under the plenary power by Op. 232 ICZN. See also to the note 089.017.1.
089.060.0.002.0	Verity (1950. Farfalle diurne d'Italia, 4: 38) listed this species under the name "*Neptis hylas* L.". This was also the situation at the time when Op. 232 ICZN was rendered. The latter name (*Papilio hylas* Linné, 1758. Syst. Nat. (ed. X), p. 486, no. 173; "habitat in Indiis" [LTR S.E. China: Eliot 1969. Bull Brit. Mus. (N.H.), Suppl. 14: 60]), however, is currently used to designate a separate Chinese species (See Bozano, 2008. Guide to the Butterflies of the Palearctic Region, Nymphalidae 3, Omnes Artes, pp. 19–20). The Italian range of *Neptis sappho* is restricted to a few sites in the extreme N.E. of the Country. Its preimaginal instars have been described by Jutzeler *et al.* (2000. Linn. belg., 17 (8): 315–332).
089.061.0	The Nymphalid Subfamily Libytheinae includes only 2 Genera, i.e. the American *Libytheana*, with 5 species and *Libythea*, with about 10, of which 1 (2) Afrotropical, 2 Malagasy, 4 Palearctic and 2 Oriental species. An additional one is limited to the Marquesas (Polynésie Française) and one has become extinct on Mauritius. See note 089.017.1 for some nomenclatural issues.
089.062.0	The genus *Satyrus*, entirely Palearctic (Centralasiatic-European), includes 14 species (see de Lesse, 1952. Ann. Soc. ent. Fr., 120: 77–101).
089.062.0.001.0	*Satyrus actaea* occurs in a very restricted number of Italian sites, all in W. Liguria. Its larval development was described by Jutzeler & Leestmans (1994. Linn. belg., 14 (5): 275–288). Even though the correct date of publication of this name would be [1781], it has been fixed to [1780] by Dir. 4 ICZN, where the exclusion of Pl. 57, Fig. 2 from its type material has also been ruled. The immature stages have been described by Garcia-Barros & José-Martín (1991. Syst. Ent., 16 (4): 407–426).
089.062.0.002.2	The name [*Papilio*] *bryce* [Hübner], [1793] was first published on p. 9 of "Der Schmetterlinge Lepidoptera Linnei", where it was created for Esper's ([1783] Pl. 85, Fig 4 (*Actaea* variet.) and text vol. 1 (2): 166 (Eine abänderung von *P. actaea*)). Since Hübner's, [1793] name has been made invalid with this authorship and date (Op. 975), the name [*Papilio*] *bryce* Hübner, [1800] (Russland), would be available to replace it, whenever needed. In Esper's original description, this "variety" is said to occur in S. France and in middle Russia. The larval development of *S. ferula* has been described by Jutzeler (1996. Linn. belg., 15 (8): 315–316; see also Jutzeler & de Bros, 1996. Bull. Soc. ent. Mulhouse, (1): 1–10; (2): 25–32).
089.063.0	The genus *Minois* is entirely Palearctic (*M. dryas* reaches Japan and Sakhalin). It includes about 4 species, 1 of which is a Taiwan endemic and the other 1 (2) is/are restricted to S.W. China (see de Lesse, 1952. Ann. Soc. ent. Fr., 120: 77–101). The date of publication of *Minois* was fixed by ICZN in Op. 150 (Dir. 4).
089.064.0	The first author to classify *Papilio circe* Fabricius within the genus *Kanetisa* was de Lesse (1952. Ann. Soc. ent. Fr., 120: 77–101; Revue fr. Lép., (15–17): 257–259), on the basis of genitalic characters. Species of *Kanetisa* are characterised in the male genitalia by having short uncus and subunci; valvae are elongate and devoid of the dorsal protuberances which characterise all other Satyrine genera. In the female genitalia, the subvaginal plate is simple and slightly carinate and the supravaginal plates are well developed and protruding cephalad. The genus *Kanetisa* is entirely Palearctic (Centralasiatic-European) and includes only 3 species (*K. circe*, *K. digna* and *K. stheno*), all rather divergent from each other in external morphology.
089.064.1	The genus group name *Brintesia* may be subjectively used at subgenus rank, or even as a distinct genus, to separate the single species here classified under *Kanetisa*. The main genitalic difference between the two consists in the slightly bulbous, spiny apex observed in the valvae of *Brintesia* while, in the female genitalia the membrane between segments 7–8 is large and reticulated (see de Lesse, 1952. Ann. Soc. ent. Fr., 120: 77–101). The immature stages have been described by Garcia-Barros & José-Martín (1991. Syst. Ent., 16 (4): 407–426).

089.065.0	Apart from *A. arethusa*, the Centralasiatic-European genus *Arethusana*, includes only up to 3 species, more frequently considered subspecies of the former, i.e. *A. aksouali* (*Satyrus arethusa aksouali* Wyatt, 1952. Z. wien. ent. Ges. 37: 175, pl. 24 (1), figs 5–8, LT: "Tachdirt, Hoher Atlas, 2500 m", endemic to the Maghreb area) and *A. boabdil* (*Satyrus boabdil* Rambur, 1840. Faune ent. Andal., 2 (5): 296, Pl. 12, Figs 1, 2; LT: "parties moyennes de la Sierra Nevada et dans les montagnes près d'Alfacar") (see de Lesse, 1951. Revue fr. Lépid., 13 (3/4): 39–43; Kudrna, 1952. Ann. Soc. ent. Fr., 120: 77–101; Kudrna, 1989. Entomologist's Gaz., 40 (1): 23–30). The immature stages have been described by Garcia-Barros & José-Martín (1991. Syst. Ent., 16 (4): 407–426) and by Olivares *et al.* (1999. Linn. belg., 17(4) p. 135–154).
089.065.0.001.0	The nomenclatural vicissitudes of the butterfly currently known as *Arethusana arethusa* apparently originated from a mistake by Boisduval (1836. Hist. nat. Insectes, Spec. gén. Lépid.), who listed in vol. 1, p. 582 no. 35 an "*Anthocharis arethusa* - Pap. id. [i.e. *Papilio arethusa*] Drury Ins., 2, Pl 19, figs 5, 6: ". Boisduval was probably aware of the incoming (Westwood's) 2nd edition (1837. Illustrations of exotic Entomology) of Drury's work, where the figs 5, 6 of pl. 19 were referred to in the text (p. 37) by the binomen *Anthocharis arethusa* (no mention of *Papilio*). As a matter of fact, Drury's (1773. Illustrations of natural History) vol. 2 Pl. 19, Figs 5, 6 depicts a butterfly whose name is listed only in the Index, on p. [91] as «Lepid. Dan. Cand. *Aritheusa*» (i.e. not "arethusa"). Even its attribution to *Papilio* may be doubtful, since it can only be deduced by the caption «Names of the Insects according to the System of Linnaeus» (who used *Papilio*). The name [*Papilio*] *aritheusa* Drury, 1773 (= *Anthocharis arethusa* Westwood, 1837) refers to the species currently known as *Colotis euippe* (Linné, 1758). In case the name *Papilio arethusa* Drury, 1773 had really existed, the binomen *Papilio arethusa* [Denis & Schiffermüller], 1775 would have been its junior primary homonym, devoid as such of any nomenclatural validity. This was, among other authors, the position taken by Verity (1955. Farfalle diurne d'Italia, 5: 292), who used the binomen *Arethusana erythia* Hübner, [1805] to designate this taxon. Since Drury's name is [*Papilio (*?)] *aritheusa* (1773. Ill nat. Hist., 2: 35, Pl. 19, Figs 5, 6 and Index, p. [91]; LT (p. 35): Sierra Leon, in Africa), such a supposed homonymy has never existed. Boiduval's mistake was doubled by another (very rare) by Kirby (1871. A synonymic catalogue of diurnal Lepidoptera), where this author, perhaps following Boisduval, listed on p. 504, no. 45 *C.*[*allosune*] *arethusa* Dru.[ry] (Pap. A. - Ill. ex. Ent., 2, Pl. 19, Figs 5, 6). *Callosune* Doubleday, [1847] is a subjective synonym of *Colotis* Hübner, [1819]. Since the times of Boisduval and of Kirby the name *Papilio aritheusa* Drury was misspelled several times, for example by Aurivillius (1898. Rhopalocera Aethiopica, p. 433) and very recently even in Funet and GloBIS, which respectively list *Papilio arethusa* Drury, 1773 and *Colotis arethusa* Drury, 1773. We will mention, for completeness, that *Papilio arethusa* Cramer, [1775] (currently *Hamadryas laodamia (*Cramer, [1777]), is a junior primary homonym of Schiffermüller's name (see on this issue note 089.066.0.006.1). See also note 089.001.0.007.0 as concerns the authorship and publication date of *Papilio arethusa*.
089.066.0	The genus *Hipparchia* is entirely Palearctic and includes 39 species in total, 8 of which are classified in the Euro-Mediterranean subgenus *Hipparchia* (see de Lesse, 1951. Revue fr. Lépid., 13 (3/4): 39–43. and 1952. Ann. Soc. ent. Fr., 120: 77–101; Kudrna, 1977; A revision of the genus *Hipparchia* Fabricius, Classey, 300 pp). See also note 089.017.1, for some nomenclatural issues. Immature stages have been described by Garcia-Barros & José-Martín (1991. Syst. Ent., 16 (4): 407–426).
089.066.1	*Eumenis* is a subjective synonym of *Hipparchia*.
089.066.2	In the absence of molecular data or other information to the contrary, we will provisionally classify *Pseudotergumia* as a subgenus of *Hipparchia* since, even though the male and female genitalia are rather divergent, in fact, they are certainly not as divergent as, for instance, those characterising the various Vanessine lineages that some authors are currently considering congeneric. *Pseudotergumia* includes 6 Mediterranean and Macaronesian species and one in S.W. Arabia. Immature stages have been described by Garcia-Barros & José-Martín (1991. Syst. Ent., 16 (4): 407–426).
089.066.3	The Centralasiatic-European subgenus *Neohipparchia* includes a total of 6 species.
089.066.4	The subgenus *Parahipparchia* range in the Euro-Mediterranean-Turanic-Macaronesian area and includes 19 species in total. Immature stages have been described by Garcia-Barros & José-Martín (1991. Syst. Ent., 16 (4): 407–426).

089.066.0.001.0	*H. aristaeus* occurs in Sardinia, Corsica and the Isle of Elba (see Cesaroni *et al.* 1995. Biol. J. linn. Soc., 52: 101–109). Some authors have observed that even though the ICZN never took any official position on the matter, (in contrast to what was the case for Linné's, Hübner's etc. names), the name *Papilio Satyrus aristaeus* Bonelli, 1826 may be subjectively considered published under the genus name *Papilio,* so that under provisions of Art. 58.1 ICZN, it would be a primary homonym of *Papilio aristeus* Stoll, 1782 (In Cramer, Uitl. Kapellen, 4: 60, Pl. 38, Figs E, F "Moluccas: Amboina"). Actually, however, even in case *H. aristaeus* were considered to have been published under *Papilio*, Art. 58 ICZN leaves room for the non-homonymy of these binomens, since in their respective original publications they were declared to have different meanings: i.e. "Equites Achivi" (for *Papilio aristeus* Stoll, 1782) and "one of the names of Apollo" (for *Papilio Satyrus aristaeus* Bonelli, 1828) (see Tremewan, 1978. Entomologist's Gaz., 29 (1/2): 70; Balletto & Passerin d'Entrèves, 1986. Boll. Mus. regionale Sci. nat. Torino, 4 (1): 133–135). The larval development has been described by Jutzeler *et al.* (1995. Linn. belg., 15 (2): 47–54).
089.066.0.002.0	The range of *Hipparchia neapolitana* is restricted to Campania and the Isles of Ischia and Capri (see Cesaroni *et al.*, 1995. Biol. J. linn. Soc., 52: 101–109). This species, which is part of the *H. aristaeus* group, may locally hybridise with *H. semele* in S. Italy (see Dapporto *et al.*, 2012. Diversity, Distrib., 18: 1066–1076). Preimaginal instars have been described by Jutzeler *et al.* (1997. Linn. belg., 16 (2): 69–84).
089.066.0.003.0	*Hipparchia blachieri* is limited to Sicily and S. Calabria. Together with *H. neapolitana*, it may be closely related to *H. senthes* (Fruhstorfer, 1908), from Turkey and the Balkans. See also Olivier (1997. Nota lepid., 20 (3–4): 150–292). The larval development has been described by Jutzeler *et al.* (1999. Linn. belg., 16 (2): 69–84 and 16 (3): 105–132).
089.066.0.004.0	The preimaginal instars have been described by Volpe & Jutzeler (2001. Linn. Belg., 18 (1): 1–26).
089.066.0.005.0	In Italy *H. fidia* occurs only at a very small number of sites, all in W Liguria.
089.066.0.006.0	Verity (1913. Boll. Soc. ent. Ital., 44: 205 and J. Linn. Soc. Lond, (Zool.), 32: 174–191) was first to observe that the only specimen bearing an autograph label in Linné handwriting still present in the Linnaean collection (London) represents the species otherwise known as *Hipparchia alcyone* (or as *H. aelia*) and not *H. fagi*. Kudrna (1977. A revision of the genus *Hipparchia* Fabricius, p. 27; see also on p. 24) has correctly designated this specimen as the Lectotype of *Papilio hermione* Linné, 1764. In the absence of a specific action by the ICZN, this designation is nomenclaturally valid, irrespectively of the many appreciable observations by Jutzeler *et al.* (2005. Linn. belg., 20 (4): 148–149), as well as by several other authors. Immature instars have been described by Volpe & Jutzeler (2001. Linn. belg., 18 (1): 1–26 and by Jutzeler *et al.* 2002. Linn. belg., 18 (6): 273–288).
089.066.0.006.1	In 1958 the ICZN has expressed its Op. 516 where it ruled on the respective nomenclatural priorities of some publications which appeared in 1775. More exactly the order in priority will be: 1) Fabricius (Syst. entomologiae [17th April]); 2) Rottemburg (von), Anmerkungen zu den Hufnagelischen Tabellen, which appeared in Der Naturforscher, vols 6 and 7 [after Fabricius and before Fuessly]; 3) Fuessly (Verzeichnis der ihm bekannten schweizerischen Insekten [after Rottemburg, before Denis & Schiffermüller]), 4) Denis & Schiffermüller (Ankündung syst. Werkes Schmett. wiener Gegend [8th December]); 5) Cramer (Uitl. Kapellen, 1: 1–132; Pls 1–89: 31st December).
089.066.0.006.2	As a consequence of the action taken by the ICZN and described in the previous note (089.066.0.006.1), the binomen *P.*[*apilio*] *alcyone* [Denis & Schiffermüller], 1775 has gained priority over *Papilio alcyone* Cramer 1775 and its substitution has become unnecessary (see also Cheiney, 2003. Bull zool. Nom., 60 (2): 2). At least in theory, the binomen *P.*[*apilio*] *alcyone* [Denis & Schiffermüller], 1775 might be subjectively used to designate an eventual subspecies of *P. hermione* Linné, 1758. On the contrary, the name *Papilio aelia* Hoffmansegg, 1804 has become nomenclaturally invalid.
089.066.0.006.3	Since Jutzeler's *et al.* (2005. Linn. belg., 20 (4): 145–160 and 2006. 20 (5): 193–206 and 20 (6): 229–233), some European authors consider now *Hipparchia genava* a separate species from *H. hermione*. Arguments favouring this hypothesis are mainly based on characters of larval morphology, since the Jullien's organs (Jullien, 1909. Bull. Soc. Lép. Genève, 1: 361–365) to which reference is also made, tend to overlap and leave many identification doubts, while characters from external morphology are fuzzy. A rather broad hybridisation area between the two taxa might occur in the East of France. While waiting for the situation to become completely clarified, perhaps by some DNA study, we prefer to provisionally maintain the name *Eumenis fagi genava* within the synonymy of *H. hermione*. In all events, it may be worth to observe that, should the two taxa represent separate species, "real" *H. hermione* (s. str.) might occur, in Italy, only on the southern slopes of the Ligurian Alps. *H. genava* is not deemed a separate species in any current European database.

089.066.0.007.0	*H. leighebi* is endemic to the Eolian Islands (see Cesaroni *et al.* 1995. Biol. J. linn. Soc., 52: 101–109). Its preimaginal instars have been described by Jutzeler *et al.* (1995. Linn. belg., 15 (3): 119–126 and 1997,16 (3): 105–132).
089.066.0.008.1	The description of *Papilio marmorae* Hübner, [1824] was based on materials already labelled with that name, that the author had received from F. A. Bonelli (see Balletto & Passerin d'Entrèves, 1986. Boll. Mus. regionale Sci. nat. Torino, 4 (1): 129–146). This species occurs in Sardinia, Corsica and the Tuscan Archipelago. The preimaginal instars of Sardinian *H. neomiris* have been described by Jutzeler *et al.* (1995. Linn. belg., 15 (2): 47–54).
089.066.0.009.0	*Hipparchia sbordonii* is endemic to the Isle of Ponza (see Cesaroni *et al.* 1995. Biol. J. linn. Soc., 52: 101–109). Its immature instars have been described by Jutzeler *et al.* (1997. Linn. belg., 16 (3): 105–132).
089.066.0.011.0	The larval development of Italian *H. statilinus* has been described by Jutzeler *et al.* (Linn. belg., 16 (6): 236–241) from Campania.
089.067.0	The Centralasiatic-European genus *Chazara* includes 10 species in total. The immature stages of *C. briseis* have been described by Garcia-Barros & José-Martín (1991. Syst. Ent., 16 (4): 407–426).
089.068.0	The genus *Erebia*, Holarctic, includes 96 species in total. Of these, 91 occur in the Palearctic (8 of which are also present in North America) and 7 are exclusively Nearctic. Verity was among the few authors to subdivide *Erebia* into subgenera. Most other authors have followed Warren's example (1936. Monograph genus Erebia, British Museum (N.H.), vii + 407 pp, 104 Pls), and recognised only a series of 14 species groups. This may be a reason why subgeneric names exist only for those species groups which include at least one European species, while several completely non-European groups have no subgeneric name (the "atramentaria group", the "edda group", the "embla group", the "magdalena group", the "vidleri group", the "wanga group"). Not all name-bearing subgenera are geographically coherent and some might be paraphyletic. The "nominal group" (subgenus *Erebia*, or the "ligea group") includes 6, fully Palearctic, species. *E. ligea* ranges as far East as Japan and the Kamchatka (see Martin *et al.*, 2002. Biol. J. Linn. Soc., 75, 319–332; Vila & Björklund, 2004. J. mol. Evol., 58: 280–290).
089.068.1	The subgenus *Marica* (or the "pandrose group"), has a Centralasiatic-European, distribution and includes 6 species.
089.068.2	The subgenus *Syngea* (Warren's "pronoe group") includes 10 species, all European, occupying the Alpine and Dinaric mountain system.
089.068.3	The subgenus *Phorcis* (or the "pluto group"), which may be paraphyletic, includes 20 species occurring in the Alpine-Dinaric-Caucasian orogenetic system. Only one of these, *E. callias* (of the *E. tyndarus* subgroup), occurs in the E. Palearctic (from Kamchatka to the Sayan Mountains), but its nominotypical populations are North American (Colorado to New Mexico). See Martin *et al.* (2002. Biol. J. Linn. Soc., 75: 319–332) and Albre *et al.* (2008. Mol. Phyl. Evol., 47: 196–210).
089.068.4	The subgenus *Gorgo* (Warren's "alberganus group") includes 8 species, 2 of which (*E. occulta* and *E. youngi*) occur in boreal America and reach E. Siberia (Chukotka). *E. pawlowskyi* occurs in N.E. Canada and on the Altai Mountains (Central Asia). *E. epipsodea* and *E. lafontainei* are strictly North American. All the remaining species are E. Palearctic, apart from *E. alberganus*, which is exclusively European.
089.068.6	The subgenus *Medusia* (or the "medusa group") includes only 3 species: *E. medusa* ranges in the European mountains and perhaps in the Caucasus, *E. polaris* occurs from Lapland to the Amur and *E. hewitsoni* is a Caucasian endemic.
089.068.7	The subgenus *Triariia* (Warren's "triarius" group) includes 2 species only. *E. triaria*, from the Alps, and *E. rossii*, occurring from the E. Palearctic to N.W. Canada.
089.068.8	The subgenus *Truncaefalcia* (or the "aethiops group") includes 5 species. *E. aethiops* is the only European species, while the other 4 are C.E. Palearctic.
089.068.9	The subgenus *Simplicia* (Warren's "epiphron group") includes 12 species and is entirely Palearctic, apart from *E. inuitica*, described from Alaska in 1966 and known from a single specimen.
089.068.0.001.0	The range of *E. aethiopellus* is restricted to the W. Italian and the S.E. French Alps, and is globally very limited on both sides of the border.
089.068.0.004.0	The species group name probably derives from Mt Albergian (3043 m), in the Cottian Alps, province of Torino.

089.068.0.004.0	*Erebia calcaria* is threatened in Europe. It is included in the Annexes II and IV of the Habitats Directive, which forbid "all forms of deliberate capture or killing of specimens … in the wild", as well as "the keeping, transport and sale or exchange, and offering for sale or exchange, of specimens taken from the wild, except for those taken legally before this Directive was implemented". In Italy, *Erebia calcaria* occurs in a very restricted area of the E. Alps. According to some authors, the date of publication of *E. calcaria* would be "1949" (Lorkovic 1949. Revue Suisse Zool., 56: 243–249), but although this paper contains many karyological details, the taxon remained unnamed until 1953.
089.068.0.005.0	Fabricius' description of *Papilio dromus* was based on materials received from "D.[ominus][Carolus] Allioni", a very well known botanist (and naturalist) of the time, who was based in Turin. Allioni used to send butterflies, as well as many other insects which he collected in Piedmont during his botanical excursions, to a restricted number of European entomologists, such as Hübner, Fabricius etc. *Papilio dromus* was considered for a long time a junior subjective synonym of *Papilio tyndarus* (see Warren, 1936. Monograph genus *Erebia*, British Museum (N.H.), vii+407 pp, 104 Pls), at a time when the "tyndarus sub-group" of *Erebia* was deemed monobasic. The only surviving specimen from the original Fabricius' collection is preserved in the Copenhagen Zoological Museum (see http://www.zmuc.dk/EntoWeb/collections-databaser/Lepidoptera/Images_Butterflies_%20fabricius/dromus_Fabricius_Papilio.jpg) and is really a male of what is currently known as *Erebia tyndarus*. Yet, irrespectively of Fabricius' handwritten label, this cannot be the Holotype of *Papilio dromus*, since it does not correspond to Fabricius' original description, which states "…ocello gemino". The CZM's specimen has very minute ocelli (invisible on ventral surface) which do not come even close to adjoining each other (*E. tyndarus*), instead of being large and geminate, as is typical of the populations from the W Alps, etc. The electrophoretic studies carried out by Lattes *et al.* (1994. Nota lepid., Suppl. 5: 93–104) have demonstrated that while so-called *Erebia neleus* (Freyer, 1833), as defined by Warren (1981. Supplement to Monograph of the genus *Erebia*. E.W. Classey), is not a separate species, what was formerly known as "*Erebia cassioides*" (sensu lato) is actually a complex of at least 2 separate species, or subjectively, subspecies. See also Martin *et al.* (2002. Biol J Linn Soc, 75: 319–332 as *E. cassioides* "J") and Albre *et al.* (2008. Molec. Syst. Evol., 47: 196–210). See also note 089.068.0.032.0.
089.068.0.005.1	In the former edition of this check-list, we used the name *Erebia carmenta* to designate the species that we are now naming *Erebia dromus* (see note 089.068.0.005.0). See also note 089.068.0.005.2.
089.068.0.005.2	The name *Erebia tyndarus* var. *arvernensis* was published by Oberthür (1908) without a description, a picture, or even an indication of a type locality, apart from its name, which may subjectively refer to the region of Auvergne, by implication. Since it does not fulfil the provisions of Art. 12.1 and 12.2 of the ICZN for a name published before 1931 (see also the exclusions listed in Art, 12.3), the name *Erebia tyndarus* var. *arvernensis* is invalid, at least with its original authorship and date.
089.068.0.006.0	The author of *Papilio cassioides*, as well as all the names of the new zoological taxa published in this paper, is Hohenwarth (see p. III). Text volume. See also note 089.068.0.032.0.
089.068.0.007.0	*Erebia christi* is threatened in Europe. It is included in the Annexes II and IV of the Habitats Directive, which forbid "all forms of deliberate capture or killing of specimens … in the wild", as well as "the keeping, transport and sale or exchange, and offering for sale or exchange, of specimens taken from the wild, except for those taken legally before this Directive was implemented". Its range is restricted to a very small sector of the C. Alps, spanning the Italian and the Swiss sides of the border.
089.068.0.009.0	As a consequence of the ICZN ruling expressed in Opinion 134, the new species described by Freyer, 1833–1858 in the 7 volumes of "Neuere Beiträge zur Schmetterlings-Kunde" «are to be treated as having been described as belonging to the genus cited by Freyer at the head of the description and not to the genus with the name of which the new specific name was actually combined (Direction 4) ». In other words, in this case, in the genus *Hipparchia*. See Heppner (1982. J. Lep. Soc., 36 (3): for the date of publication.
089.068.0.011.0	*E. flavofasciata* is restricted, in Italy, to a very small sector of the C. Alps, close to the Swiss border.
089.068.0.012.1	The name *Erebia hecuba*, originally published to designate a separate species, represents a junior subjective synonym of *Erebia gorge carboncina* Verity, 1916 (Bull. Soc. ent. ital., 47: 54. LT: [Italy: Marche:] Monti Sibillini: Fonte della Pescolla).
089.068.0.014.0	See note 089.001.0.007.0 as concerns the authorship and publication date of this name.
089.068.0.016.0	In this particular case, the author has chosen to spell his own name as "Fuesslins", while at a time when the use of patronymics was not yet very widespread in Europe, he chose in other occasions to write it as "Fuesslin" or, perhaps more often, as "Fuessly". For the sake of uniformity, we have chosen to use the latter spelling, which is also used in Op. 503 (ICZN).

089.068.0.021.0	The Italian range of *Erebia nivalis* is limited to a very small sector of the E. Alps. See also note 089.068.0.032.0.
089.068.0.022.0	*Erebia oeme* occurs, in Italy, only in the province of Udine, in the N.E. of the Country. We have dissected a large number of specimens from other parts of the Italian (pre-) Alps, which were superficially very similar to (and sometimes indistinguishable from) *E. oeme*, but they invariably demonstrated to be *E. medusa*.
089.068.0.023.0	*Erebia ottomana* is restricted, in Italy, to the Monte Baldo area, between the provinces of Verona and Trento. Its preimaginal instars have been described by Jutzeler *et al.* (2002. Linn. belg., 18 (8): 377–390).
089.068.0.026.0	Hübner, [1804] (Samml. europ. Schmett.) figured two different species, both under the name of [*Papilio*] *alecto*. The first, figured on Pl. 101, Figs 515, 516, is currently known as *Erebia pluto* de Prunner. The second, figured on Pl. 104, Figs 528, 529, represents *Erebia stiria* Godart. Schawerda (1911. Verh. zool-bot. Ges. Wien, 61: [36]) and later on Turati (1914. Atti Soc. ital. Sci. nat, 53: 5), as well as Verity (1953. Farfalle diurne d'Italia, 5: 147), had thought that Hübner's [1804] name could be restricted to designate the second of these species. Warren (1928. Entomologist's Rec. J. Var., 40: 129), however, has observed that Godart (1824. Encyclopédie méthodique d'Histoire naturelle, 9: 530), may be seen as to have acted as First Reviser since, by describing *Satyrus stirius* as a new species, he had de facto restricted Hübner's name to represent the species currently known as *Erebia pluto*.
089.068.0.027.0	See note 089.18.0 on the use of diacritics in scientific names.
089.068.0.028.0	The range of *Erebia scipio* is restricted to a very small sector of the Italian W. Alps, paralleled by an almost as small area on the French side of the border.
089.068.0.029.0	The species-level separation of *Erebia stiria* and *E. styx* was demonstrated by Lorković (1952. Z. Lepidopt., 2 (3): 159–176). The adults' morphology was discussed by Jutzeler *et al.* (2002. Linn belg, 18 (5): 205–220 and 18 (7): 335–350). This name is frequently misspelled "styria". or "stirius". Adults' and larval morphologies have been described by Jutzeler *et al.* (2001. Linn. belg., 18 (3): 113–124; 18 (4): 175–186 and 2002, 18 (5): 205–220 and 18 (7): 335–350). See note 089.068.0.026.0 as concerns the nomenclature of this species.
089.068.0.030.0	See notes 089.068.0.009.0 and 089.068.0.029.0. The preimaginal instars of *E. styx* have been described by Jutzeler *et al.* (2001. Linn. belg., 18 (3): 113–124 and 18 (4): 175–186). The adults' morphology was discussed by Jutzeler *et al.* (2002. Linn belg, 18 (5): 205–220 and 18 (7): 335–350).
089.068.0.032.0	The taxonomic treatment of species within the "*Erebia tyndarus* group" has been the subject of many papers, perhaps the most important of which are those by Lorković (1953. Rad. jugosl. Akad. Znan. Umjetn., 294: 163–192; 1953. Boll. Int. Acad. Sci. Yugosl., Zagreb, 294: 163–192), Warren (1954. Entomologist's month. Mag., 90: 129–131; 1955. Entomologist, 91: 135–144; 1959. Entomologist's Rec. J. Var., 71: 184–190); Lorković & de Lesse (1960. Boll. Soc. ent. ital., 90 (7/8): 123–129); Lattes *et al.* (1994. Nota lepid., (Suppl. 5): 93–104); Martin *et al.* (2002. Biol. J. Linn. Soc., 75: 319–332); Albre *et al.* (2008. Molec. Syst. Evol., 47: 196–210). *Erebia tyndarus* is restricted, in Italy, to a very small sector of the C. Alps.
089.069.0	The genus *Oeneis* is Holarctic. 26 species of this genus occur in the Palearctic Region, 5 of which are circumpolar and extend to boreal North America. The exclusively Nearctic species are 6 (or 7) (see Lukhtanov & Eitschberger, 2000. *Oeneis*. In Bauer & Frankenbach (Eds), Butterflies of the World, Pt 11 – Nymphalidae 5. 12 pp, 26+2 Pls; Lukhtanov & Eitschberger, 2001. Catalogue of the Genera *Oeneis* and *Davidina*, in Bauer & Frankenbach (Eds), Butterflies of the World, Suppl.4, 37 pp). The date of publication of the genus *Oeneis* has been fixed by the ICZN by Op. 150 (Dir. 4).
089.070.0	The genus *Melanargia* is entirely Palearctic and includes 25 species in total (see Bozano, 2002. In Bozano (ed.) Guide to the butterflies of the Palearctic Region. Satyrinae pt 3. Subtribes Melanargiina and Coenonymphyna (*Melanargia*, *Coenonympha*, *Sinonympha*, *Triphysa*). Omnes Artes, 71 pp).
089.070.1	Hemming (1967: 54) and Bridges (1988: IV.11) have suggested that the type species of *Arge* Hübner, [1819] is [*Papilio*] *psyche* Hübner, [1800] (Samml. europ. Schmett., Pl. 44, Figs 198, 199; text [1806] 1: 32, no. 40), by selection by Butler (1868. Entomol. month. Mag. 4: 196, no.9). Unfortunately this is not the case because the species selected by Butler as type of the genus *Arge* Hübner was actually *Papilio syllius* Herbst, 1796 (Natursyst. bekannt. Ins., 8: 15, no. 3. Pl. 182, Figs 8, 9). Since Hübner [1819] did not mention *P. syllius* among the species originally included in his genus *Arge*, Butler's selection is invalid (Art. 67.2 ICZN).

089.070.0.001.0	*Melanargia arge* is considered threatened in Europe. It is included in the Annexes II and IV of the Habitats Directive, which forbid "all forms of deliberate capture or killing of specimens … in the wild", as well as "the keeping, transport and sale or exchange, and offering for sale or exchange, of specimens taken from the wild, except for those taken legally before this Directive was implemented". The larval development has been described by Jutzeler (1994. Nota lepid., 16 (3/4): 213–232).
089.070.0.001.1	Some confusion has arisen from the fact that in the original description of *Arge pherusa*, Boisduval (1832), while providing very accurate pictures of this species, made also reference to Esper's Pls 70, Fig. 1 [1781] and 111, Fig. 1 [1800] purportedly depicting "Arge sicula". This has created a double problem. Esper's pictures of "das Sicilianische Schachbret", described, (but without a latinized name) in vol. 1 (2): 105, represent *Melanargia arge*, as correctly stated in vol. 1 (1): 318. Verity (1953. Farfalle diurne d'Italia, 5: 49) made a similar error by citing the (nomenclaturally) non-existing name "siciliae" Esper, purportedly published in vol. 1 (2) on "p. 18". The name [*Papilio*] *arge sicula* was only created by Borkhausen, although while making reference to Esper's Pls 27 Fig. 1 [1777] and 70 Fig. 1 [1781]. Whether or not *Melanargia arge* has ever occurred in Sicily proper remains a mystery, since no collection specimen is known to support this possibility and Stauders' (1926) report from "Santo Stefano di Camastra" (Province of Messina) remains doubtful.
089.070.0.003.0	The Italian range of *M. occitanica* is restricted to W. Liguria. Its preimaginal instars have been described by Jutzeler *et al.* (1995. Linn. belg., 15 (1): 9–16).
089.070.0.003.2	Since [Hübner]'s [1793] "Die Schmetterlinge Lepidoptera Linnei" was rejected for nomenclatural purposes (Op. 975), the authorship and date of valid publication of this name became Hübner, [1800] (Samml. europ. Schmett., Pl. 44, Figs 198, 199; text [1806] 1: 32, no. 40). The type locality was fixed in the text volume of the "Sammlung" [1806] (1: 32, no. 40).
089.070.0.004.0	*M. pherusa* is a Sicilian endemic. Its preimaginal instars have been described by Jutzeler *et al.* (1996. Linn. belg., 15 (5): 203–213).
089.070.0.005.0	The larval development of Italian *M. russiae japygia* has been described by Jutzeler *et al.* (1995. Linn. belg., 15 (4): 182–188).
089.071.0	The genus *Maniola* is entirely Palearctic and has Euro-Mediterranean-Turanic distribution. It includes 7 species (see de Lesse, 1952. Ann. Soc. ent. Fr., 121: 61–76). See also note 089.072.0.
089.071.0.001.0	Linné (1758. Syst. Nat., (ed. x), 1: 475) described this species under two different names, the first of which, (*Papilio jurtina* no. 104) was proposed to designate males, and the other (*P. janira* no. 106) the females. Giorna (1791. Calendario entomologico, p. 23–26) was apparently the first author to denounce this mistake, which he discussed also with reference to observations by de Villers (1789 Caroli Linnaei entomologia, etc., 2: 31, 32, who reports on a copula between them, observed by Müller) and de Loche (1791. Memoria entomologica contenente alcune osservazioni sul volo degli Insetti. 16 pp, Torino, nella Stamperia Reale).
089.071.0.002.0	The larval development of *M. nurag* is described by Jutzeler *et al.* (1997. Linn. belg., 16 (4): 143–149).
089.072.0	The genus *Hyponephele* has Centralasiatic-European generalised distribution (only 1 species reaches N. China) and includes 54 species, some of which may be subjectively considered subspecies, mostly with restricted ranges. See de Lesse (1952. Ann. Soc. ent. Fr., 121: 61–76) and Bogadanov *et al.* (1997. In Tuzov (ed.), Guide to the Butterflies of Russia and adjacent Countries, Pensoft, 1: 217–231); Eckweiler & Bozano (2011. Satyrini: Subtribe Maniolina, in Bozano (ed.) Guide to the Butterflies of the Palearctic Region. Satyrinae, Part IV, 102 pp. Omnes Artes, Milano).
089.072.0.001.0	The larval development of *Hyponephele lupina* has been described by Jutzeler & Lanfranchis, (2005. Linn. belg., 20 (1): 35–44).
089.072.0.002.0	Even though Kirby (1871. A synonymic catalogue of the diurnal Lepidoptera, p. 76, Gen. 29 no. 2) and Verity (1953. Farfalle diurne d'Italia, 5: 239) concur in giving credit for this species to Kühn (1774. Der Naturforscher, 3: 21, Pl. 2, Figs d–f), the author of the name *Papilio lycaon* is actually Rottemburg. Kühn, in fact, has depicted, but not named, the species. The preimaginal instars have been described by Jutzeler & Lanfranchis (2005. Linn. belg., 20 (1): 35–44).
089.073.0	The genus *Aphantopus* includes only 3 (4) species, 2 (3) of which are East Palearctic. This genus used to be classified among the Coenonymphini (see Miller, 1968. Mems Amer. ent. Soc., 24: 1–174), but molecular data would rather assign it to the Maniolini (see Martin *et al.*, 2000. Mol. Phyl. Evol., 15 (1): 70–82; Peña *et al.*, 2006. Mol. Phyl. Evol., 40: 29–49).

089.074.0	The genus *Pyronia* includes 3 Euro-Mediterranean species, while *Epinephele coenonympha* Felder & Felder, 1867, from the Himalayas, is currently classified in the genus *Hyponephele* (see de Lesse, 1952. Ann. Soc. ent. Fr., 121: 61–76; Eckweiler & Bozano 2011. Satyrini: Subtribe Maniolini, in Bozano (ed.) Guide to the Butterflies of the Palearctic Region. Satyrinae, Part IV, 102 pp. Omnes Artes, Milano). The date of publication of *Pyronia* has been fixed by the ICZN in Op. 150 (Dir. 4).
089.074.1	The name *Idata* is subjectively available to designate only one species *P. cecilia,* at most at subgenus level.
089.074.0.001.0	The larval development of *Pyronia cecilia* has been described by Jutzeler (1998. Linn. belg., 16 (8): 303–306).
089.075.0	The Holarctic genus *Coenonympha* includes 32 species in the Palearctic and 2 in the Nearctic Region (*C. haydeni* and the Holarctic *C. tullia*, the latter with several subspecies. See Pelham 2012 see http://butterfliesofamerica.com/US-Can-Cat.htm). See also Davenport (1941. Bull. Harvard Mus. comp. Zool., 87: 215–349), Bozano (2002. In Bozano (ed.) Guide to the butterflies of the Palearctic Region. Satyrinae pt 3. Subtribes Melanargiina and Coenonymphina (*Melanargia*, *Coenonympha*, *Sinonympha*, *Triphysa*). Omnes Artes, 71 pp), Wiemers (2007. Oedippus, 25: 1–42). The date of publication of the genus-group name *Coenonympha* has been fixed by the ICZN in Op. 150 (Dir. 4).
089.075.0.002.0	The type locality of this species is somewhat controversial. The name *Papilio corinna* is among the several names that Hübner, [1804] pre-published with respect to Bonelli, who had sent him materials from Sardinia. Bonelli's description of *Papilio norax*, in fact, occurred only in 1826 (see Balletto & Passerin d'Entrèves, 1986. Boll. Mus. regionale Sci. nat. Torino, 4 (1): 129–146). Hübner's selection of the type locality of this species as "Sicilien" was therefore probably made in error. Grillo (1999. Natural. sicil., (4) 23 (3–4): 591–592), however, reports of the capture of two Sicilian specimens of this species at Bosco della Ficuzza (PA) on 18-07-98. One of these specimens is now preserved in the collection of the Genova Natural History Museum (E. Gallo; verbal communication). O. Costa's (1840. Fauna siciliana) citation from "Madonie, Termini, Palermo" was already refuted by Zeller (1847. Isis von Oken, [40] (2): 16). The occurrence of this species in Sicily can only be established after further confirmation. The larval development has been described by Jutzeler & de Bros (1996. Linn. belg., 15 (8): 315–316.).
089.075.0.003.0	*Coenonympha darwiniana* is morphologically intermediate between *C. arcania* and *C. gardetta* and it is not unlikely that it represents the stabilised hybrid between the former (♂) and the latter (♀) species (see Wiemers, 1998. Mém. Soc roy. belge Ent., 38: 41–70). No direct molecular evidence is available, at the moment, to demonstrate this, since no study of the nuclear DNA of these taxa has been made available (see also Wiemers, 1994. Diplomarbeit, Universität Bonn: Biologie). Among current European databases, *Coenonympha darwiniana* is accepted as a separate species by Funet, but not by Fauna europaea and PESI, which rank it as a subspecies of *C. gardetta*. Its full species rank, however, is supported by results obtained by Schmitt & Besold (2010. Zool. J. Linn. Soc., 159: 890–904).
089.075.0.003.1	The systematic position of this taxon has long-time been controversial. Turati & Verity described it as *C. arcania macromma*. This view was upheld by Verity (1955. Farfalle diurne d'Italia, 5: 99), who listed it within his "exerge arcania". Wiemers (1994. Diplomarbeit, University of Bonn), made a detailed electrophoretic work of 24 allozymes and classified it under *C. gardetta darwiniana*. Still more recently, Schmitt & Besold (2010. Zool. J. Linn. Soc., 159: 890–904), in another electrophoretic paper, have recommended that *C. macromma* is granted full species rank. Even though some of the arguments raised by Schmitt & Besold (2010) are convincing, a full species rank for this taxon does not seem sufficiently substantiated and we have chosen to consider it under *C. darwiniana*, at least for the moment. Doubtless enough, "*C. macromma*" is morphologically intermediate between *C. arcania* and *C. darwiniana*, and genitalia are, in this case, unhelpful. It is certainly not impossible that hybridisation had a role in the origin of these populations, perhaps by reverse hybridisation, or via the backcross between *C. darwiniana* and *C. arcania*. This hypothesis is not incompatible with results obtained by Schmitt & Besold (2010: Fig. 2).
089.075.0.005.0	*C. elbana* may be subjectively considered an allopatric "subspecies" of *C. corinna* (Hübner). Its preimaginal instars have been described by Jutzeler *et al.* (1996. Linn. belg., 15 (8): 332–347). Kodandaramaiah & Wahlberg (2009. Syst. Ent., 34: 315–323) have estimated the divergence time between *C. corinna* and *C. elbana* at around 2 Myr ago.
089.075.0.005.1	"subspecies trettaui" is superficially almost intermediate between *C. corinna* and *C. elbana*, although closer to the second. Its preimaginal instars have been described by Jutzeler & de Bros (1997. Linn. belg., 16 (2): 63–67).

089.075.0.006.0	The identification of the exact type locality of *C. gardetta* (given by de Prunner as "Val Varaita") has been the object of many arguments. Initially, de Loche (1801. Mem. R. Accad. Sci. Torino, 11: 146, no. 7) had cited "la Gardetta dans la vallèe de Vrayta", while Rocca (1950. Boll. Soc. ent. ital., 80 (9–10): 82–88) had suggested that it was on "Altopiano della Gardetta", which is rather far to the South from Val Varaita, actually between the Maira Valley and Vallone dell'Arma. Rocca himself (1951. Boll Soc. ent. ital., 81 (5–7): 56–61) had later on changed his mind and suggested that it could be by Ponte della Gardetta (1800 m). The current hypothesis favours Sant'Anna di Bellino: Borgata Gardetta (see Balletto *et al.*, 2007. Mem. Mus. civico St. nat. Verona, (2) (Scienze della Vita), 17: 257–261, 280 pls on CD-ROM).
089.075.0.008.0	*Coenonympha oedippus* is threatened in Europe. It is included in the Annexes II and IV of the Habitats Directive, which forbid "all forms of deliberate capture or killing of specimens … in the wild", as well as "the keeping, transport and sale or exchange, and offering for sale or exchange, of specimens taken from the wild, except for those taken legally before this Directive was implemented". See Bonelli *et al.* (2010. Oedippus, 26: 25–30) for a description of this species' ecology in Italy.
089.075.0.012.0	Boillat (2002. Alexanor, 22: 243–309) concluding a very detailed morphological study of the *C. pamphilus* group, has argued that *Papilio lyllus* Esper [1806] represents a separate W. Mediterranean species occurring, in Italy, only in Sardinia. Verity (1955. Farfalle diurne d'Italia, 5: 115) had reached a relatively similar conclusion, and separated it in his "exerge *lyllus*", together with "*sicula*" Zeller, 1847. The taxonomic separation of *C. lyllus* has been confirmed, among the others, by Dapporto (2010. Biol. J. Linn. Soc., 100: 195–212) and Dapporto *et al.* (2012. Diversity, Distrib., 18: 1066–1076), who concurred with Verity's interpretation that *C. lyllus* occurs also in Sicily (see also Wiemers (2007. Oedippus, 25: 1–42). The latter interpretation, however was not supported by some, as yet unpublished, molecular data which, as concerns the Italian territory, confine *C. lyllus* to Sardinia (L. Dapporto personal communication).
089.075.0.011.0	*Coenonympha rhodopensis* was separated from *C. tullia* by Sijarich (1976. Wiss. Mitt. Bosn-herzeg Landesmus., (C) 6: 133–177).
089.075.0.011.0	*C. tullia* is restricted, in Italy, to a very small sector of the E. Alps, in the Tarvisio area, close to the Austrian border.
089.076.0	The genus *Pararge* includes 3 species having a generalised Euro-Mediterranean-Macaronesian distribution (see de Lesse, 1952-Ann. Soc. ent. Fr., 121: 61–76). The date of publication of the genus *Pararge* has been fixed by the ICZN in Op. 150 (Dir. 4).
089.077.0	The genus *Lasiommata* is (almost) entirely Palearctic. It may be subjectively considered to include the subgenus *Lopinga*, which is otherwise as subjectively treated as a separate genus (see de Lesse, 1952. Ann. Soc. ent. Fr., 121: 61–76). In the male genitalia the uncus, in lateral view, is narrow at base and clearly dilated before mid length, while the subunci are slender, running close to the uncus and pointed. In the female genitalia, the papillae are protruding cephalad and the subvaginal plate is narrow. *Lasiommata* (s. str.) includes 13 Palearctic species, together with *L. felix*, from Yemen and *L. maderakal*, from the C. Ethiopian mountains (see Bozano, 1999. In Bozano (ed.) Guide to the butterflies of the Palearctic Region. Satyridae 1, Omnes Artes, 58 pp). The date of publication of the genus *Lasiommata* has been fixed by the ICZN in Op. 150 (Dir. 4).
089.077.1	On the basis of some unpublished DNA evidence (N. Wahlberg) *Lopinga* may subjectively be considered a separate genus from *Lasiommata*. *Lopinga* includes 9 species, all Palearctic, comprised the Nepalese *Lasiommata* (*Lopinga*) *lehmanni* (Forster, 1980) (see Bozano 1999. In Bozano (Ed.), Guide to the Butterflies of the Palearctic Region, Satyridae, pt. 1, Omnes Artes, 58 pp.). We follow Kudrna (1990) in considering *Lopinga* under *Lasiommata*, with which it shares several genitalic characters (see note 089.077.0). *Lopinga*, however, differs from *Lasiommata* in having thicker and shorter uncus (♂ genit.) and shorter signa in the corpus bursae (♀ genit).
089.077.2	Species of the genus *Dira* Hübner have no direct phylogenetic relationship with *Lasiommata*. The genus-group name *Dira* is currently used to designate 4 completely South African species.
089.077.0.001.0	*L. achine* has become extinct in many parts of the western and central Italian Pre-Alps, where it sharply declined between 1910 and 1940 (Bonelli et al, 2011. J Insect Conserv, 15: 879–890). More to the East it is stable and in apparently good conditions. This species is listed in the Appendix IV of the EU Habitats Directive, which forbids "all forms of deliberate capture or killing of specimens … in the wild", as well as "the keeping, transport and sale or exchange, and offering for sale or exchange, of specimens taken from the wild, except for those taken legally before this Directive was implemented".
089.077.0.003.0	The pre-imaginal instars of *L. megera* are described by Jutzeler & de Bros (1997. Linn. belg., 16 (1): 43–47).

089.077.0.005.0	*L. paramegera* is sometimes subjectively considered a "subspecies" of *Lasiommata megera*, but most authors agree that it represents a separate species (see Kudrna, 1977. Atalanta, 8 (4): 290–293; Dapporto, 2007. Biol. J. Linn. Soc., 91: 703–710; Dapporto, 2008. J. Zool. Syst. Evol. Res., 46 (3), 224–230; Dapporto *et al.*, 2012. Diversity, Distrib., 18: 1066–1076). Its preimaginal instars clearly differ from those of *L. megera*, as described by Jutzeler (1998. Linn. belg., 16 (7): 267–276).
089.078.0	See note 089.037.1 as concerns the dating of this and other Kluk's names. The Pantropical genus *Danaus* includes 11 species in total (see Ackery & Vane- Wright, 1984. Milkweed Butterflies, their cladistics and biology. British Museum (N. H.), ix+245 pp).
089.078.1	*Danaus chrysippus* is the only Paleotropical species once assigned to the subgenus *Anosia*. The other 2 are *D. eresimus* (American) and *D. gilippus (*mainly Nearctic).
089.078.0.001.0	*D. chrysippus* (s. l.) represents a complex of 4 semi-species, once (-4 My) fully isolated, which came to hybridise as a consequence of the Holocene climate warming. The taxon currently found in the Mediterranean area is *D. chrysippus* (s. str. See Smith *et al.*, 2005. Zool. J. Linn. Soc., 144: 191–212 and 2010. Ecol. Ent., 35 (Suppl. 1): 77–89). *D. chrysippus* (s. l.) is a migrant, Pan-Paleotropical, species which reaches Australia and New Zealand. No stable populations of this species are known to occur in N. Italy, where some migrant specimens are occasionally observed. In C. and S. Italy it has now several apparently stable colonies, which it began to establish in the mid 1980s (Gatto, 1985. Giornale ital. Ent., 2: 369–370; Zilli, 1987. Boll. Ass. romana Ent., 42: 19–20.). Before these times, it had appeared (by accidental introduction?) in the Naples area (Torre del Greco), in the years 1805–1807, but had soon become extinct (see Gagliardi, 1808. Atti R. Istituto d'Incoraggiamento, 1 (1): 155–161, Pl. [1], Figs 1–4).