

## Case 3471

### ***Heterolaophonte* Lang, 1948 (Crustacea, Copepoda, Harpacticoida): proposed precedence over *Mesolaophonte* Nicholls, 1941 and *Monolaophonte* Nicholls, 1941**

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**Abstract.** The purpose of this application, under Articles 23.9.3 and 81.2.3 of the Code, is to conserve the generic name *Heterolaophonte* Lang, 1948 for a group of marine harpacticoid copepods (family LAOPHONTIDAE) by giving it precedence over the unused senior names *Mesolaophonte* Nicholls, 1941 and *Monolaophonte* Nicholls, 1941 whenever these names are considered to be synonyms.

**Keywords.** Nomenclature; taxonomy; Copepoda; Harpacticoida; LAOPHONTIDAE; *Heterolaophonte*; *Mesolaophonte*; *Monolaophonte*; *Heterolaophonte stroemii*; harpacticoid copepod; cosmopolitan.

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1. In his revision of the harpacticoid copepod family LAOPHONTIDAE Scott, 1905, Nicholls (1941, p. 98) divided the type genus *Laophonte* Philippi, 1840 into five subgenera: *Laophonte* Philippi, 1840 (type species *Laophonte cornuta* Philippi, 1840 by monotypy), *Mesolaophonte* Nicholls, 1941 (type species *Laophonte littoralis* Scott & Scott, 1893 by original designation), *Metalaophonte* Nicholls, 1941 (type species *Laophonte depressa* Scott, 1894 by original designation), *Monolaophonte* Nicholls, 1941 (type species *Laophonte curvata* Douwe, 1929 by monotypy) and *Neolaophonte* Nicholls, 1941 (type species *Laophonte trilobata* Willey, 1929 by original designation).

2. Lang (1944, p. 34) established the genus *Heterolaophonte* (family LAOPHONTIDAE) but no type species was fixed. Lang (1944) divided the genus into seven species-groups and designated a 'Typus' for each: (1) *stroemii*-group (spelled by Lang as *strömi*) (typified by *Cyclops stroemii* Baird, 1837) (spelled by Lang as *strömi*), (2) *minuta*-group (typified by *Laophonte minuta* Boeck, 1873), (3) *littoralis*-group (typified by *Laophonte littoralis* Scott & Scott, 1893), (4) *quinespinosa*-group (typified by *Laophonte quinespinosa* Sewell, 1924), (5) *discophora*-group (typified by *Laophonte discophora* Willey, 1929), (6) *campbelliensis*-group (typified by *Laophonte campbelliensis* Lang, 1934) and (7) *tenuispina*-group (typified by *Laophonte tenuispina* Lang, 1934). Wells et al. (1982, p. 178) proposed a new genus *Quinquelaophonte* Wells, Hicks & Coull, 1982 (type species by original designation *Laophonte quinespinosa* Sewell, 1924) for the species of the *quinespinosa*-group. Nowadays, Lang's other species-groups are no longer recognised as taxonomically useful units (Wells, 2007, p. 85).

3. Many of the names and nomenclatural acts proposed by Lang (1948) originated in his 1944 preamble to his monograph. Lang's (1944) paper was not widely disseminated (but nevertheless satisfied the criteria of publication) and most

post-1948 authors have ignored it or were not aware of its existence. Recent workers (e.g. Wells & Rao, 1987; Huys, 1990, 1992; Huys & Willems, 1989; Huys & Conroy-Dalton, 1996; Bodin, 1997; Seifried, 2003; Wells, 2007) have begun to credit Lang (1944) with the authorship of the respective names and acts but it has remained unnoticed that some genus-group names, such as *Heterolaophonte*, were not explicitly made available by that work (Article 13.3 of the Code). As pointed out by Vervoort (1964, p. 333), Lang (1948, p. 1368) formally designated *Cyclops stroemii* Baird, 1837 as the type species of *Heterolaophonte* and hence the authorship and date of the genus-group name *Heterolaophonte* should be attributed to Lang (1948). Vervoort & Holthuis (1983, p. 56) subsequently pointed out that Norman (1903, p. 368) had already designated *Cyclops stroemii* as the type species of *Dactylopusia* Norman, 1903 (family DACTYLOPUSIIDAE) (a new replacement name for *Dactylopus* Claus, 1863 *non* Gill, 1860). Since Norman (1903), when designating *Cyclops stroemii* as the type species of *Dactylopusia*, had intended the dactylopusiid species identified by Claus (1863, p. 126, Plate XVI, Figs. 1–6) as such and not the real *Cyclops stroemii*, Vervoort & Holthuis (1983) asked the Commission to use its plenary power to set aside all previous type fixations made for *Dactylopusia* Claus, 1863 and to designate *Dactylopus tisboides* Claus, 1863 as type species. The Commission voted in favour of Vervoort & Holthuis's (1983) application and, as a result, the generic name *Heterolaophonte* Lang, 1948 and the specific name *Cyclops stroemii* Baird, 1837 (type species of *Heterolaophonte* Lang, 1948) were placed on the Official Lists of Generic and Specific Names in Zoology, respectively (Opinion 1356, December 1985, BZN 42(4): 335–337). Since Baird (1837, p. 330) had named the species after the prominent Norwegian zoologist Hans Ström (also spelled Strøm), under Article 32.5.2.1 the correct spelling is *stromii* as originally proposed by Baird (1837). It should, however, be noted that Vervoort & Holthuis (1983, p. 56) had changed the spelling of *stromii* to *stroemii*, and the latter spelling was accepted by the Commission. In order to ensure consistency with the ruling in Opinion 1356 the incorrect subsequent spelling *stroemii* is to be preserved unaltered and no Official Correction (Article 80.4) is required. Some authors (Apostolov & Marinov, 1988; Bodin, 1997; Wells, 2007) have also erroneously attributed *Cyclops stroemii* to Baird (1834) but that paper only quoted the species as *Cyclops brevicornis* O.F. Müller, 1776 (p. 97) as which it had originally, but incorrectly, been identified. The original description of *Cyclops stroemii* (as '*Cyclops Stromii*') was given in Baird (1837, p. 330).

4. Since Lang (1948) assigned both *Laophonte littoralis* Scott & Scott, 1893 (spelled incorrectly by Scott & Scott (1893, p. 238) as *littorale*) (type species of *Mesolaophonte* Nicholls, 1941) and *Laophonte curvata* Douwe, 1929 (type species of *Monolaophonte* Nicholls, 1941) to the genus *Heterolaophonte*, the genus-group names *Mesolaophonte* and *Monolaophonte* are currently senior subjective synonyms of *Heterolaophonte*. Nicholls's (1941) subgeneric division was based solely on the endopodal armature of the female third pair of swimming legs and his system has been criticised for its artificiality by Lang (1948, p. 1620) and Vervoort (1964, p. 314). Both authors abolished Nicholls's subgenera but they were not formally synonymised with or subsumed within existing genera in prevailing usage. Since *Mesolaophonte* Nicholls, 1941 and *Monolaophonte* Nicholls, 1941 are perfectly legitimate and available names, they cannot be ignored. The subgeneric name *Mesolaophonte* has only been used twice as a valid name since Lang (1948). Krishnaswamy (1959) assigned his new

species *Laophonte pseudoculata* Krishnaswamy, 1959 (spelled by Krishnaswamy (1959, p.29) as *pseudo-oculata*) to *Laophonte* (*Mesolaophonte*) and Raibaut (1962) suggested a similar subgeneric assignment for *Laophonte commensalis* Raibaut, 1962. *Heterolaophonte* is one of the three most speciose genera in the LAOPHONTIDAE (the others being *Laophonte* Philippi, 1840 and *Paralaophonte* Lang, 1948), currently accommodating 33 valid species and 3 subspecies (Wells, 2007; Varela & Ortiz, 2008), and has been recorded from all oceanic basins including the Antarctic Ocean (Apostolov & Pandourski, 2001). Papers referring to *Heterolaophonte* include studies focussing on taxonomy (e.g. Lang, 1965; Hicks, 1975; Mielke, 1975, 1981; Willen, 1992), ontogeny (Dahms, 1989, 1990, 1993), ultrastructure (Hosfeld, 1994), seasonality and reproduction (e.g. Johnson & Scheibling, 1986; Rao & Sarma, 1994; Chertoprud & Azovsky, 2006), feeding (Azovsky et al., 2005), vertical migration (Walters, 1988), dispersal (Ólafsson et al., 2001; Thiel & Gutow, 2005), community structure (e.g. Hartzband & Hummon, 1973; Hicks, 1980; Hockin, 1982; Jarvis & Seed, 1996; Gheerardyn et al., 2008) and symbiotic relationships with other invertebrates (Boer, 1971; Dumitrescu & Marcus, 1967; Varela & Ortiz, 2008) and epibiotic microorganisms (Hockin, 1984; Carman & Dobbs, 1998). A list of 110 selected references by 72 authors published in the last 50 years demonstrating the wide usage of the name *Heterolaophonte* Lang, 1948 is held by the Commission Secretariat. The replacement of the well-known and universally accepted name *Heterolaophonte* Lang, 1948 by one of its two underused senior subjective synonyms would result in many new combinations and undue confusion in the nomenclature and taxonomy of the LAOPHONTIDAE in general, and of its most speciose genus in particular. Unfortunately, since the conditions of Article 23.9.1 are not met (the senior synonyms have been used as valid names after 1899), reversal of precedence is only possible by a Commission's ruling (Article 23.9.3). To promote stability it is proposed to give the name *Heterolaophonte* Lang, 1948 precedence (Article 81.2.3) over both *Mesolaophonte* Nicholls, 1941 and *Monolaophonte* Nicholls, 1941 whenever these names are considered synonyms. However if, in the light of future revisions, *Heterolaophonte* is found not to be congeneric with *Mesolaophonte* and/or *Monolaophonte* both senior genus-group names are still available to denote the two taxa as originally proposed by Nicholls (1941).

5. The International Commission on Zoological Nomenclature is accordingly asked:

- (1) to use its plenary power to give the generic name *Heterolaophonte* Lang, 1948 precedence over the names *Mesolaophonte* Nicholls, 1941 and *Monolaophonte* Nicholls, 1941, whenever it and either of the other two are considered to be synonyms;
- (2) to emend the entry on the Official List of Generic Names in Zoology for *Heterolaophonte* Lang, 1948 (gender: feminine), type species by original designation, *Cyclops stroemii* Baird, 1837, to record that it is to be given precedence over the names *Mesolaophonte* Nicholls, 1941 and *Monolaophonte* Nicholls, 1941, whenever it and either of the other two are considered to be synonyms;
- (3) to place on the Official List of Generic Names in Zoology the following names:
  - (a) *Mesolaophonte* Nicholls, 1941 (gender: feminine), type species by original designation *Laophonte littoralis* Scott & Scott, 1893, with the endorsement

- that it is not to be given precedence over the name *Heterolaophonte* Lang, 1948 whenever the two names are considered to be synonyms;
- (b) *Monolaophonte* Nicholls, 1941 (gender: feminine), type species by monotypy *Laophonte curvata* Douwe, 1929, with the endorsement that it is not to be given precedence over the name *Heterolaophonte* Lang, 1948 whenever the two names are considered to be synonyms;
- (4) to place on the Official List of Specific Names in Zoology the following names:
- (a) *littoralis* Scott & Scott, 1893, as published in the binomen *Laophonte littoralis* (specific name of the type species of *Mesolaophonte* Nicholls, 1941);
- (b) *curvata* Douwe, 1929, as published in the binomen *Laophonte curvata* (specific name of the type species of *Monolaophonte* Nicholls, 1941).

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Acknowledgement of receipt of this application was published in BZN **65**: 162.

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