

**41 STAPHYLINIDAE FROM A SEASHORE HABITAT : THE ZWIN SALTMARSH AT KNOCKE, BELGIUM (INSECTA, COLEOPTERA).** *G. Haghebaert* - Koninklijk Belgisch Instituut voor Natuurwetenschappen (KBIN), Brussels.

During a year-round survey, the rove beetle fauna of a saltmarsh at the east-coast of Belgium was studied. 81 species, belonging to 11 subfamilies, were collected in five micro-habitats : three stations were situated in the saltmarsh which was irregularly flooded by the sea during spring and autumn, the other stations were situated at the edge of the saltmarsh and a small dune, and in the dune itself. The species can be grouped into two major categories : typical halobiont species, generally of a restricted distribution and a second group with mostly eurytope ubiquitous. The dominant species, amongs the small group of halobionts are *Bledius tricornis*, *Bledius unicornis* and *Quedius simplicifrons* all occurring in the saltmarsh. Among the dominant eurytopic species we found *Xantholinus linearis*, *Ocyopus olens* and *Drusilla canaliculata*, all widely distributed and *Oxypoda brachyptera* at the edge of the sand dune. A number of very rare species are recorded : *Lamprinodes saginatus* and *Oxypoda lurida*. The *Bledius unicornis* population in the Zwin is probably the last in Belgium. Furthermore faunistical and phenological information is given on the most typical species and some notes are given on parasitic fungi and phoretic nematodes. Finally we can state that the *Staphylinidae* fauna from the Zwin saltmarsh is rather poor and this for two reasons : 1) the high salinity of the soil and 2) the frequent flooding of the area. It appears to be much less diverse than the other Belgian saltmarsh at Nieuwpoort.

**42 RELATIONSHIP BETWEEN HOST-PLANT VARIETY AND APHID PHENOLOGY IN MAIZE CROPS.** *Th. Hance* - Université Catholique de Louvain (UCL).

The host plant constitutes one of the major factors which act on the expression of aphid population growth potential. It influences aphid development by means of food quality, but also through morphological adaptations such as pilosity or sclerotinisation of cell membranes, and by means of biochemical compounds (repellent or toxic compounds). In this context, we have analysed the demographic growth and development of aphids on four maize varieties (Topaze, Magda, Dea, Solida) in the laboratory and in field conditions. Three aphid species were tested: *Rhopalosiphum padi*, *Methopolophium dirhodum* and *Sitobion avenae*. In the laboratory, the method used was the characterization of the demographical parameters during the beginning of the adult life (1). In the field, aphid numbers were weekly recorded on 10 plants of each-variety. Simultaneously, a leaf occupation index was established on 40 plants per