Bulletin of the British Myriapod Group 5 (1988)

ECCLCGY AND DISTRIBUTION IN LITHOBIOMORPH AND GEOPHILOMORPH CENTIPEDES: GLEANINGS FROM THE SEVENTH INTERNATIONAL CONGRESS OF MYRIAPODOLOGY HELD AT VITTORIO VENETO IN JULY 1987.

J.G.E. Lewis
Taunton School, Taunton, Somerset. TA2 6AD

During the Congress a number of participants reported on the ecology of lithobiomorphs and to a lesser extent of geophilomorphs and additional information was added in general discussion. An attempt is made here to draw together the information which might be of interest to those working on the North European fauna.

Lamyctes fulvicornis

This is an unusual species. In the laboratory it goes through its full developmental cycle in less than one year (G. Andersson). In D.D.R. was found to be a pioneer species on mine sites and disappeared as woodland matured except in a steadily eroding site (W. Dunger and K. Voigtlander). Enghoff (in discussion) reported that it increased in a number of disturbed sites in Sweden. Dunger (in conversation) expressed the view that it was a grassland species but did not think that its surface activity was limited to August and September as in England. 3. Meidell reported that L. fulvicornis was the only species found in bogs in the Parces.

P.M. Johns expressed the view in discussion that it was an Australian species introduced into Europe with exotic plants in the first half of the nineteenth century and pointed out that it reproduced sexually in Australia. He suggested that European biologists had underestimated the number of introductions from the Antipodes.

Ecological succession

Dunger & Voigtlander's conclusion that Lamyotes fulvicornis is a pioneer species in mine sites in DDR has been mentioned above. It is followed by Lithobius forficatus and L. microps and then L. melanops, crassipes and calcaratus.

Lithobius mutabilis and piceus had not colonised the soils of brown coal heaps after 33 years. Geophilus electricus, Necrophloeophagus longicornis and Schendyla nemorensis are very late colonisers of mixed deciduous woodland.

T. Poser described the effect of varying the depth of litter in a 150 year old beech wood in which <u>Lithobius mutabilis</u> was the most common species and <u>L. crassives</u> the second most common followed by <u>L. piceus</u> and <u>L. curtipes</u>. When all the litter was removed <u>L. crassives</u> was the only lithobiomorph remaining due to its habit of feeding on tree trunks. <u>Strigamia acuminata</u> increases in deep litter but soildwelling geophilids are more abundant in the areas without litter.

Distribution .

<u>Lithobius curtipes</u> is the only lithobiid found in Taiga in Russia (N. Zalesskaja) but is also found in the Anatolian Peninsula (Zapparoli).

- B. Meidell and T. Solhoy reported that the record of <u>Pachymerium ferrugineum</u> from the Farces referred in fact to <u>Strigamia maritima</u>. Meidell registered some scepticism about the record of <u>Pachymerium</u> from the south coast of England.
 - R.M. Shelley discussed allopatric/parapatric mosaic complexes of species in millipedes. Such patterns are not seen in British centipedes. W. Shear commented that the sympatry seen in continental lithobiids was probably the result of recolonisation after the ice age: centipedes may show mosaic distributions in unglaciated areas.

Acknowledgements

I attended the Seventh Congress of Myriapodology with a grant from the Royal Society Research in Schools Committee which is gratefully acknowledged. I also wish to thank Dr. D.J. Stradling for his advice and support.