

Acknowledgements

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References

- BRAENDEGAARD, J. 1958: Araneida. The Zoology of Iceland, Vol. III, Pt. 54. pp. 88-99.
- LOCKET, G. H. and MILLIDGE, A. F. 1953: British Spiders. Vol. 2, Ray Soc., Lond.
- WIEHLE, H. 1956: Spinnentiere oder Arachnoidea (Araneae), 28. Familie Linyphiidae - Baldachin-spinnen. Tiewelt Dtl. 1956. pp. 164-223.
- WIEHLE, H. 1963: Beitrage zur Kenntnis der deutschen Spinnenfauna III. Zool. Jb. Syst. Bd. 90, 1963. pp. 255-259.

Nomenclature: *Liphistius*, *Argiope*

Opinion 933 of the Commission on Zoological Nomenclature places the generic name *Liphistius* on the Official List of Generic Names in Zoology, no. 1928; *desultor*, in combination with *Liphistius* on the Official List of Specific Names in Zoology, no. 2418, and the family name Liphistiidae on the Official List of Family Group Names in Zoology, no. 455; and the name *Lipistius* on the Official Index of Rejected and Invalid Names in Zoology, name no. 1985.

Application ZN(S) 1789 to the Commission has been made to preserve the name *Argiope*. Comments should be addressed to the Commission at the British Museum (Natural History) (*Bull. Zool. Nomencl.*, 27 (3/4): 200-201).

BOOK REVIEW

The Spiders of New Zealand Part I (1967): by R.R. Forster. Otago Museum Bulletin No. 1. pp. 1 - 124; 180 figs. Dunedin.

Part II (1968): Ctenizidae, Dipleuridae by R. R. Forster; Migidae by C. L. Wilton. Otago Museum Bulletin No. 2. pp. 1 - 180; 571 figs. Dunedin.

Part III (1970): Desidae, Dictynidae, Hahniidae, Amaurobioididae, Nicodamidae by R. R. Forster. Otago Museum Bulletin No. 3. pp. 1 - 184; 534 figs. Dunedin.

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The appearance of the third part of this important work provides an occasion for a notice, although the 1500 species of spider thought to occur in New Zealand will take some time to describe. Part I provides an introduction to the group, an account of the internal and external anatomy and of life-history and habits. A key to the families, into which the New Zealand spiders were found to fit, then follows. The rest of the volume is devoted to short accounts of appearance and habits of typical members of each family, illustrated by magnificent drawings of whole spiders at the hand of Mr. Barry Weston. Each drawing was made from living specimens or colour transparencies and they must provide an extremely valuable guide to anyone taking up a study of the group. The historical note at the beginning of this part is particularly interesting, as are the notes about the families, classified here on traditional lines. One surprising fact is that the Micryphantidae (Erigoninae) do not occur naturally in New Zealand and that all the species present are introduced.

In Part II, dealing with the mygalomorph families, it is pointed out that only in the last decade has it been realised that mygalomorphs are extremely abundant in New Zealand in both species and numbers. The authors make the interesting point that "the taxonomic analysis of mygalomorph spiders presents many difficulties which are not usually found in araneomorph spiders. It is evident that the tunnel dwelling habit, coupled with poor dispersal ability, leads to local differentiation to a much

greater extent than is found in spiders leading a less restricted life". And again: "... it is probable that the main isolating factors influencing speciation in many earth dwelling mygalomorphs are comparatively minor, such as availability of soil suitable for burrowing and the depth of the water table." Such features would be of short duration (geologically) and their rapid changes would tend to fragment the widespread populations. This might provide an explanation of the occurrence of so many species of the genus *Cantuaria*, of which 42 are described here and many more are known to occur; it is the only ctenizid genus in the country. The Migidae, a family close to Ctenizidae and occurring round the world south of the equator, are represented by 30 species of the sole genus *Migas* L. Koch; they are trap-door spiders, many making their nests on tree trunks. The remaining 35 species, in three genera, are in the family Dipleuridae. Altogether 93 new species of mygalomorphs have been described.

Part III begins an account of the araneomorph families. Here, taxonomy is of great interest since the author concludes definitely that the cribellum may be lost at generic and even species levels, and that this happens when the spiders abandon snare-weaving and become hunters. It is extremely interesting to find the conclusion so well supported by examples in this fauna; for instance, whereas the two snare-spinning *Ixeuticus* species are cribellate, those in the closely related genus *Goyenia* are arboreal hunters and are without cribellum or calamistrum. As the authors point out, the only recent classification which is relevant is that of Lehtinen in 1967. The spiders considered in this Part were placed by Lehtinen in his super-family Amaurobioidea. In previous classifications they would have been in the families Agelenidae, Amaurobiidae, Dictynidae, Desidae, Hahniidae, Toxopidae, and the Amaurobioididae. The present authors divide this section of the araneomorphs into two super-families, the Amaurobioidea and the Dictynoidea, differing mainly in the structure of the tracheal systems, which are unbranched in the former and branched (at least the median pair) in the latter. The present volume deals with the Dictynoidea, which comprise the families Dictynidae, Hahniidae, Desidae, Cybaeidae, Argyronetidae, Amaurobioididae and Anyphaenidae.

As an indication of the importance of the present work it may be mentioned that in the one family Desidae, twelve new genera (out of a total of 19) have been created and 72 new species described. The 31 hahniid species (25 of them new) are placed in six new genera, and these are separated by characters which would hardly be recognised as sufficient in the northern forms.

The study of a fauna with such large numbers of very closely related forms will obviously prove extremely interesting. One naturally wonders if the many new species will retain this status, or if some will turn out only to be of sub-specific rank, but it is not possible to offer useful criticism at this distance.

Finally, it must be emphasized that the work is of great general interest; all three parts are very finely printed and the illustrations are of a very high standard indeed.

G. H. Locket

Note on a colour slide sequence showing effect of *Dolomedes*' bite

On 11 July 1970 at Thursley Common, Surrey, I took a sequence of colour slides at about 2 minute intervals of an immature *Dolomedes fimbriatus* (Clk.) which had jumped on to a damsel-fly *Lestes sponsa* (Hans.). The damsel-fly offered little resistance after the first few seconds, even though *Dolomedes* did not appear to have grasped her wings. *Dolomedes*' first bite, as revealed by the slides, penetrated the front of the face, the left fang penetrating the damsel-fly's right eye. The sequence of slides show a progressive change in the colour of *Lestes*' eye, centering on the point of penetration, from the original bright green to mottled grey.

N.A.Callow
