

## PHYLOGENY AND BIOGEOGRAPHY OF THE LOPHOPIDAE (HEMIPTERA FULGOROMORPHA)

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Within the Fulgoromorpha, the Lophopidae have been recognized as a paraphyletic taxon (Soulier *et al.*, 1996). The Neotropical genera *Hesticus* and *Silvanana* have been shown to be more closely related to the Ricaniidae. All the other lophopid genera form a monophyletic group characterised by three synapomorphies:

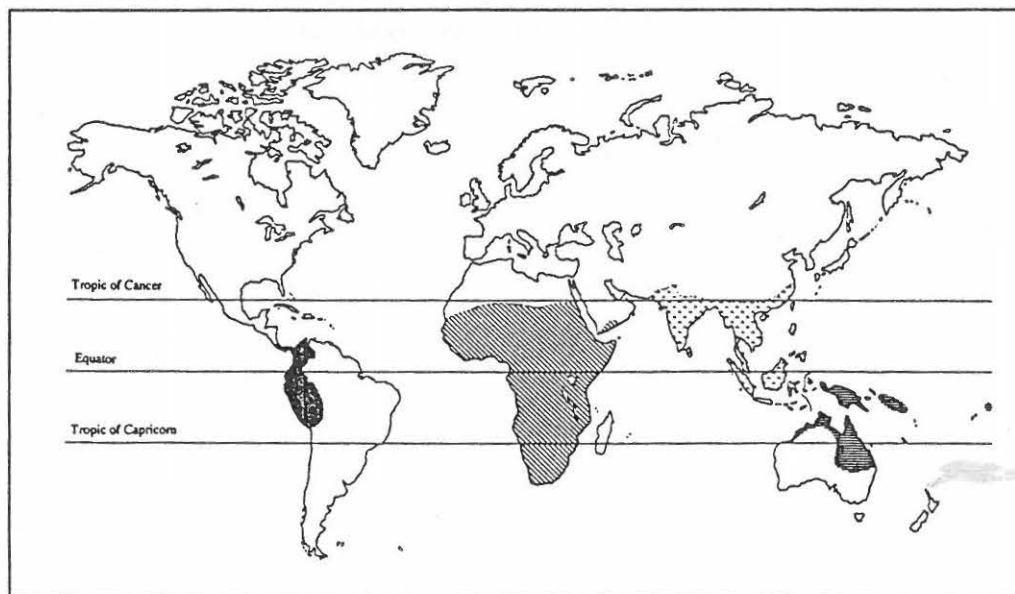
- Enlarged apex of the anal tube,
- Gonocoxae IX absent,
- Gonospiculum absent.

Two main monophyletic clades are recognised, *Menosca*<sup>+</sup> and *Paracorethrura*<sup>+</sup>. The ornamentation of the bursa copulatrix is characteristic for *Menosca*<sup>+</sup> and for *Paracorethrura*<sup>+</sup>, the first hind tarsal segment bearing a pad of micro setae. In the basal lophopid genera, the group *Jugoda*<sup>+</sup> is characterised by its autapomorphic elevated lateral carina of the vertex.

This family is essentially found in the Oriental and Australasian regions with the exception of (i) *Lophops* and *Elasmoscelis* which are also present in Africa and (ii) *Carriona* found in the Neotropical region. From a biogeographical point of view, the two monophyletic ingroups recognised, *Menosca*<sup>+</sup> and *Paracorethrura*<sup>+</sup> appear coherent. *Carriona*, the last neotropical genera still placed within the Lophopidae and apparently allied to the *Jugoda*<sup>+</sup> group, presents a transpacific paradoxal track.

### References

Soulier, A. G., Bourgoin, Th., and M. R. Wilson. 1996. Are the Lophopidae (Homoptera, Fulgoromorpha) a paraphyletic taxon? Proceedings XX Int. Congr. Entomol., Firenze, Italy, August 25-31 1996, pp. 484.



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