

A new species of *Magnimyiolia* Shiraki (Diptera: Tephritidae: Trypetinae) and new records of Acanthonevrini from India

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Abstract

A new species of the subfamily Trypetinae, *Magnimyiolia perennifascia* Singh & David, sp. nov. (Trypetini) is described from India. Two species of subfamily Phytalmiinae, *Ectopomyia baculigera* Hardy and *Ptilona conformis* Zia (Acanthonevrini) are recorded for the first time from India. An updated key to Oriental species of *Magnimyiolia* Shiraki is provided.

Key words: Tephritidae, *Magnimyiolia*, *Ectopomyia*, *Ptilona*, new record

Introduction

Magnimyiolia Shiraki belongs to the tribe Trypetini in subfamily Trypetinae, which is characterized by the presence of 3 or 4 pairs of frontal and 2 pairs of orbital setae; moderately developed ocellar seta; dorsocentral seta placed well behind postsutural supra-alar seta; vein R_{4+5} setose to crossvein r-m or about level with crossvein dm-cu; lobe of cell bcu relatively short; oviscapte long and flat, usually as long as tergites III-V. Recently, Chen *et al.* (2013) revised *Magnimyiolia* and described four species along with an updated key. Thirteen species of this genus are known from the Eastern Palaearctic, Oriental and Australasian Regions (Chen *et al.*, 2013; Norrbom *et al.*, 1999).

Ectopomyia and *Ptilona* belong to subfamily Phytalmiinae, which is considered to be a monophyletic entity comprising the tribes Acanthonevrini, Phytalmiini, Phascini and Epacrocerini (Korneyev, 2000). The members of Phytalmiinae that were known, primarily infest decaying plant matter such as bamboo and fallen logs (Dohm *et al.* 2014). Even though many species are known, the detailed biology of only a few has been recorded (Dohm *et al.* 2014).

Ectopomyia is similar to *Hexacinia* Hendel in having two pairs of frontal setae that are very close together, with the lower setae incurved and the upper setae reclinate, but differs in the darker head setae and characters of the abdomen and wing pattern. The genus includes two species which are known from Laos, southern China and Malaysia (Chua, 2009; Hancock, 2014). *Ptilona* has a straight vein R_{2+3} and bare vein Rs, a single pair of orbital setae and only two pairs of scutellar setae. Eight species of this genus are known from northeastern India to Taiwan, the Philippines and eastern Indonesia (Hancock, 2011). Hancock (2011) included it in a group of nine genera that also includes *Rioxoptilona* Hendel, which breeds in decaying bamboo shoots. However, *Ptilona* is usually associated with decaying bamboo culms (Dohm *et al.*, 2014).

In this paper, a new species of *Magnimyiolia*, namely *M. perennifascia* Singh & David sp. nov., is described from Sikkim, India. Two species, *Ectopomyia baculigera* Hardy and *Ptilona conformis* Zia, are recorded for the first time from India.

References

- Chen, X.-L., Wang, X.-J. & Zhu, C.-D. (2013) New species and records of Trypetinae (Diptera: Tephritidae) from China. *Zootaxa*, 3710 (4), 333–353.
<http://dx.doi.org/10.11646/zootaxa.3710.4.3>
- Chua, T.H. (2009) *Ectopomyia hancocki*, a new species of acanthoneverine fly (Diptera: Tephritidae: Phytalmiinae) from Peninsular Malaysia. *Raffles Bulletin of Zoology*, 57 (1), 25–27.
- Dohm, P., Kovac, D., Freidberg, A., Rull, J. & Aluja, M. (2014) Basic biology and host use patterns of Tephritisid flies (Phytalmiinae: Acanthonevrini, Dacinae: Gastrozonini) breeding in bamboo (Poaceae: Bambusoidea). *Annals of Entomological Society of America*, 107 (1), 184–203.
<http://dx.doi.org/10.1603/AN13083>
- Hancock, D.L. (2011) An annotated key to the species of *Acanthonevra* Macquart and allied genera (Diptera: Tephritidae: Acanthonevrini). *Australian Entomologist*, 38 (3), 109–128.
- Hancock, D.L. (2012) A note on the identity of '*Acanthonevra*' *inermis* Hering (Diptera: Tephritidae: Acanthonevrini). *Australian Entomologist*, 39 (3), 195–196.
- Hancock, D.L. (2014) An annotated key to the *Rioxa* complex of genera (Diptera: Tephritidae: Acanthonevrini). *Australian Entomologist*, 41 (1), 45–54.
- Hardy, D.E. (1973) The fruit flies (Tephritidae: Diptera) of Thailand and bordering countries. *Pacific Insect Monograph*, 31, 1–353.
- Korneyev, V.A. (2000) Phylogenetic Relationships among Higher Groups of Tephritidae. In: Aluja, M. & Norrbom, A.L. (Eds.), *Fruit Flies (Tephritidae): Phylogeny and Evolution of Behaviour*. CRC Press, Boca Raton, pp. 73–113.
- Norrbom, A.L., Carroll, L.E., Thompson, F.C., White, I.M. & Freidberg, A. (1999) Systematic database of names. In: Thompson (Eds.), Fruit fly expert identification system and systematic information database. *Myia*, 9, pp. 65–251. [total page number: 524 pp.]
- White, I.M., Headrick, D.H., Norrbom, A.L. & Carroll, L.E. (1999) Glossary. In: Aluja, M. & Norrbom, A.L. (Eds.), *Fruit flies (Tephritidae): phylogeny and evolution of behaviour*. CRC Press, Boca Raton, pp. 73–113.
- Zia, Y. (1965) Notes on the Chinese trypetid flies IV. *Acta Zootaxonomica Sinica*, 2, 211–217.