



Disjunct distribution of Uzelothripidae (Thysanoptera) new to Australia

DESLEY J TREE

Entomology Collection, Primary Industries and Fisheries, Brisbane, Queensland. E-mail: desley.tree@deedi.qld.gov.au

The order Thysanoptera (thrips) is divided into two sub-orders, Terebrantia with eight families, and Tubulifera with just one family. Within Terebrantia, the family Uzelothripidae contains only a single genus and species, *Uzelothrips scabrosus* Hood. This is believed to have derived independently from an early offshoot of the thysanopteran sub-order Terebrantia (Mound & Marullo, 1996), and has no close phylogenetic relationship with any other thrips taxa (Mound & Morris 2007). The form of the wings, antennae, cephalic tentorium and female ovipositor are unlike those of any other Thysanoptera (Fig. 1). The forewings (when present) have no longitudinal veins, but have marginal cilia arising from sockets. The antennae are exceptionally long and slender, and the third segment has a unique circular sensorium ventrally near the apex. The cephalic tentorium is well developed, and the ovipositor is membranous and protusible with no developed valves (Mound *et al.* 1980, Moritz *et al.* 2001).

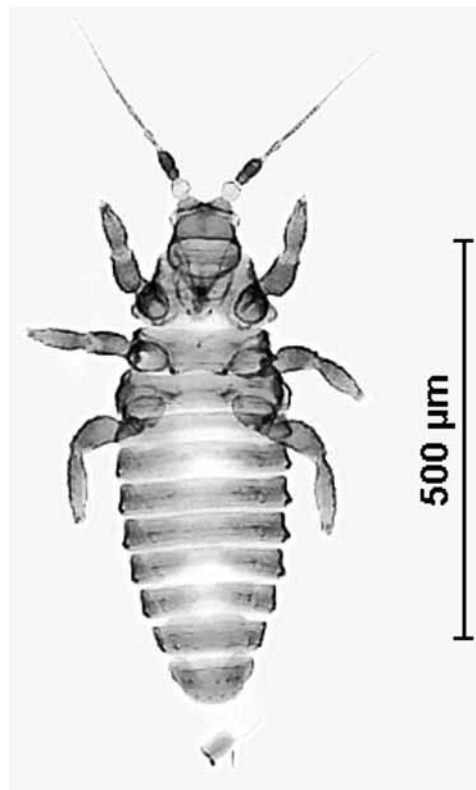


FIGURE 1. *Uzelothrips scabrosus* apterous female.

Until recently this extraordinary, presumably fungus-feeding, thrips has been found only in Brazil (Belem) and Singapore, on dead twigs and in litter. This disjunct pattern of geographical distribution may have resulted from human trading activities (Mound 1983). However during a study of leaf-litter and bark dwelling thrips in southeast Queensland, Australia, four apterous females of *U. scabrosus* were collected from under bark of trunks of *Eucalyptus major* trees in the dry sclerophyll forest at two locations within Brisbane Forest Park; Gap Creek Reserve - S27.479 E152.929 – 60m altitude, xii.2008; i.2009 (three females), and Enoggera State Forest - S27.433 E152.891 – 271m altitude, iii.2009 (one

female). These thrips were collected by spraying the tree trunk with insecticide and collecting the fallen insects on a cloth sheet spread around the base of the trunk. This new distribution record now takes the numbers of Thysanoptera families found in Australia to six.

References

- Moritz, G., Morris, D.C. & Mound, L.A. (2001) *ThripsID Pest thrips of the world*, CD-ROM, CSIRO Publishing, Melbourne, Australia.
- Mound, L.A. (1983) Natural and disrupted patterns of geographical distribution in Thysanoptera (Insecta). *Journal of Biogeography*, 10, 119–133.
- Mound, L.A. & Marullo, R. (1996) *The Thrips of Central and South America: An Introduction. Memoirs on Entomology, International 6*. Associated Publishers, Florida, USA, 487 pp.
- Mound, L.A. & Morris, D.C. (2007) The insect Order Thysanoptera: Classification versus Systematics. *Zootaxa*, 1668, 395–411.
- Mound, L.A., Heming, B.S. & Palmer, J.M. (1980) Phylogenetic relationships between the families of recent Thysanoptera. *Zoological Journal of the Linnean Society of London*, 69, 111–141.