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The genus *Sciara* Meigen (Diptera, Sciaridae) in New Caledonia, with the description of two new species

PEKKA VILKAMAA¹, HEIKKI HIPPA² & WERNER MOHRIG³

¹Finnish Museum of Natural History, Zoology Unit, P.O. Box 17, FI-00014 University of Helsinki, Finland.
E-mail: pekka.vilkamaa@helsinki.fi

²Gribbylunds all 2, SE-183 65 Täby, Sweden. E-mail: heikki.hippa@gmail.com

³Puddemin 6, D-18574 Poseritz, Germany. E-mail: wmoehrige@hotmail.com

Abstract

The genus *Sciara* Meigen includes two species in New Caledonia, both newly described: *Sciara insulana* sp. n. and *S. turgidula* sp. n. The species are diagnosed and figured.

Key words: Sciaroidea, Australasian region, biodiversity, systematics

Introduction

The Diptera of New Caledonia have been most intensively studied since the late 1980's, and most of the results have been presented in the seven volumes of *Zoologia Neocaledonica* (Tillier 1988, Chazeau & Tillier 1991, Matile *et al.* 1993, Najt & Matile 1997, Najt & Grandcolas 2002; Grandcolas 2008, 2009). For the Bibionomorpha, the known New Caledonian fauna includes Bibionidae (Fitzgerald 2004) and some groups of Sciaroidea: Lygistorrhinidae (Matile 1986), Keroplatidae (Matile 1988a), Ditomyiidae (Matile 1988b), Mycetophilidae: Mycomyinae, Sciophilinae and Gnoristinae (Matile 1991) and Mycetophilidae: Leiinae and Manotinae (Matile 1993). These studies show a high degree of endemism in the New Caledonian dipteran fauna, at least at the species level. However, the level of endemism in New Caledonia is known to vary among insect groups (Chazeau 1993, Cranston 2010). Current knowledge of the insect fauna, especially Diptera, its affinities, possible origin, and diversity, was summarized by Couri *et al.* (2010).

Tens of species have been described in *Sciara*, but the genus has only been revised in the Palaearctic (Menzel & Mohrig 2000) and the Nearctic (Mohrig *et al.* 2013) regions. It is also clear that not all species placed in *Sciara* in other regions, are congeneric. With regard to previously revised local faunas of the Australasian region, the genus seems to be absent from Micronesia and New Zealand (Steffan 1989, Mohrig & Jaschhof 1999), but present in New Guinea (Mohrig 2004). Nearly all Sciaridae species known in Australia are placed in *Sciara* (Steffan 1989) and are in need of revision.

This is a continuation of the studies by the present authors of the unexplored sciarid fauna of New Caledonia, some other genera have been treated previously, namely: *Keilbachia* Mohrig (Vilkamaa *et al.* 2011), *Pseudolycoriella* Menzel & Mohrig (Vilkamaa *et al.* 2012a), *Ctenosciara* Tuomikoski (Vilkamaa *et al.* 2012b), *Bradysia* Winnertz (Vilkamaa *et al.* 2012c), *Scatopsicaria* Edwards (Vilkamaa *et al.* 2012d) and *Epidapus* Haliday (Vilkamaa *et al.* 2014). Köhler and Menzel (2013) described two new species of *Bradysia*, gave new records of species of all genera of Sciaridae found in New Caledonia, and listed the species known in the area thus far. Together with the two newly described ones, the number of New Caledonian Sciaridae species is 54.