

## **Article**



## The genus *Ctenosciara* Tuomikoski (Diptera, Sciaridae) in New Caledonia, with the description of eight new species

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## **Abstract**

The genus *Ctenosciara* Tuomikoski, 1960, includes the following species in New Caledonia, all newly described: *Ctenosciara cracens* **sp. n.**, *C. crinita* **sp. n.**, *C. depilis* **sp. n.**, *C. depressa* **sp. n.**, *C. exilis* **sp. n.**, *C. inflata* **sp. n.**, *C. lobigera* **sp. n.** and *C. obesa* **sp. n.** Some of the species show for the genus previously unknown characters. A key to the New Caledonian species of *Ctenosciara* is provided.

Key words: Diptera, Sciaridae, Ctenosciara, key, new species, Australasian region, New Caledonia

## Introduction

The Diptera of New Caledonia have been studied mainly since the late 1980's, and the results have been presented mainly 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). Of 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 et Gnoristinae (Matile 1991) and Mycetophilidae Leiinae et Manotinae (Matile 1993). These studies show a high degree of endemism of 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 recently summarized by Couri *et al.* (2010). This is the third part of an ongoing study by the present authors of the thus far unknown sciarid fauna of New Caledonia, the genus *Keilbachia* Mohrig (Vilkamaa *et al.* 2011) and *Pseudolycoriella* Menzel & Mohrig (Vilkamaa *et al.* 2012) having been treated earlier.

Ctenosciara Tuomikoski, 1960 (type-species Sciara hyalipennis Meigen, 1804), 25 species are currently known worldwide, 12 of which from the Australasian region (Hardy 1960, Steffan 1969, Mohrig & Jaschhof 1999). Various Australasian materials seen by the authors are rich in undescribed species of Ctenosciara. The genus is diverse also in the eastern Palaearctic, seven species having been recorded from Japan (Sutou & Ito 2003) and six from China (Wu et al. 2010). From Europe, only three species are known (Menzel & Mohrig 2000, Salmela & Vilkamaa 2005).

Tuomikoski's (1960) original definition of *Ctenosciara* was meagre and he based it on the only species known to him at the time, *C. hyalipennis* (Meigen). Menzel and Mohrig (2000) redescribed the genus and postulated its phylogenetic relationships. In case all of the present New Caledonian species are correctly placed in *Ctenosciara*, the concept should be emended regarding the setosity of the posterior wing veins, the presence of the intercoxal lobe of the hypopygium and the vestiture of the front tibial organ.

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