Studies of Madagascan Ptiliidae (Coleoptera) 1: The Tribe Discheramocephalini including eighteen new species

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Abstract

This is the first report detailing Ptiliidae collected from forest leaf litter by the Moravian Museum expeditions to Madagascar 2010-2011. 18 new species in three genera are described and figured: Discheramocephalus bisulcatus sp. n.; D. vasilii sp. n.; Cissidium banari sp. n.; Dacrysoma andasibense sp. n.; D. imitatum sp. n.; D. delicatum sp. n.; D. denticulatum sp. n.; D. dolorosum sp. n.; D. fabrum sp. n.; D. fusum sp. n.; D. longulum sp. n.; D. nigrimum sp. n.; D. pilosum sp. n.; D. rahanitriniae sp. n.; D. ranomafanense sp. n.; D. ravelosoni sp. n.; D. subinsulum sp. n.; and D. varium sp. n.

Key words: taxonomy, Ptiliidae, Cissidium, Discheramocephalus, Dacrysoma, Madagascar

Introduction

This is the first of four articles detailing the Ptiliidae collected in Madagascar by Dr Petr Baňař of the Moravian Museum (Brno, Czech Republic) and his students Ricca Raveloson and Lalao Sahondra Rahanitriniaina. The work, which is ongoing, was started as part of the long-term research project ‘Étude à long terme de la biodiversité des groupes choisis d’insectes (Coléoptères, Hétéroptères, Lepidoptères et Homoptères) dans les localités préalablement sélectionnées en considération de la recherche et la protection de la biodiversité dans les aires protégées de Madagascar’ in co-operation with the Department of Entomology of the University of Antananarivo, initiated by Milos Tryzna (Czech Republic) in 2007. All the Ptiliidae collected have since been passed to the Natural History Museum in London (BMNH). To date collecting has focussed on the Andasibe -Mantadia, Ankarafantsika, Montagne d’Ambre and Ranomafana National Parks, and the Ambohitantely Special Reserve, but it is planned to extend activities to other smaller and less well-known reserves in the future.

The reserves are located in several distinct climatic and structural zones. The Andasibe-Mantadia and Ranomafana National Parks are situated in the dense rain forest on the east face of the chain of mountains which runs like a spine down the east-centre of the Island. Together with the narrow coastal plain before the Indian Ocean this area was once covered by forest but much has now been lost and the remnants of these rain forests (both primary and secondary, very often mixed) are now fragmented. The zone to the north contains the Montagne d’Ambre National Park. Situated on the slopes of the volcanic massif it is particularly noteworthy for a high number of endemic species. This reserve is covered with rain forest and isolated within the mountain complex being surrounded by strictly seasonal dry deciduous forests, savannahs and agricultural land. The Ambihintantely Special Reserve, located in the Central Plateau, is composed of rain forests with a canopy height of 8–16 m (c. 50%) which are now isolated by surrounding dry savannahs (c. 35%) and secondary forest (including plantations of exotic trees). The large Ankafantsika National Park in the north west is a mosaic of dense and dry seasonal deciduous forests, and is particularly well known for its lakes and many species of birds and lemurs. The Park offers very different biotypes in comparison with the reserves mentioned above. The reserve is situated in the west part of the island at a much lower altitude (practically lowland) and is strictly seasonal, lacking precipitation for many months. The invertebrate fauna here is very different from that in the east of the Island.

Many writers on the Ptiliidae note that the existence of large numbers of undescribed species prevents much needed basic research into classification within the family. Riedel et al. (2013) encountered a similar problem in