



### ***Nossidium katyae*, a new species of Bolivian Ptiliidae (Coleoptera), described and figured**

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#### **Abstract**

This is the third report on a collection of Ptiliidae from Bolivian forest leaf litter made by Dr Petr Baňar of the Brno Museum (Czech Republic) in 2013. A new species *Nossidium katyae*, is described and figured on the basis of a single specimen collected in the Amboro National Park. Comparative figures of *Nossidium pilosellum* Marsham are provided together with a brief synopsis of views on the desirability of establishing a new subfamily within the Ptiliidae to include *Nossidium* group species.

**Key words:** Coleoptera, Ptiliidae, *Nossidium*, new species, Bolivia

#### **Introduction**

This paper continues the study of the 2,786 Ptiliidae collected in Bolivia by Dr Petr Baňar of the Moravian Museum (Brno, Czech Republic) in 2013 further details of which, including a map showing the locations of the areas studied, are given in the first two papers in this series (Darby 2015a and b). This paper is concerned with a single taxon, immediately recognisable as a new species, which was taken in the West Amboro National Park, Santa Cruz Department.

The new species was placed at first in a new genus but later provisionally assigned to *Nossidium* pending future revision of that genus. Like *Nossidium* it possesses a similar rounded form and wing shape unlike all other Ptiliidae genera except *Motschulskium* Matthews, *Sindosium* Johnson and *Bicavella* Johnson. *Sindosium* and *Bicavella* also share with *Nossidium* aedeagi possessing distinct parameres. It is possible that those of *Motschulskium* and the new species may also possess this feature but males have not been recorded in these genera.

The wing shape and possession of parameres are the main factors which have encouraged several authors to ascribe the genera to a separate subfamily although no formal family-group name has been established. In making the case for this separation Dybas (1976), who referred to this group informally as the '*Nossidium* group' of genera, pointed out that the larval mouthparts of *Nossidium* and *Motschulskium* possess a separated lacinia and galea unlike all other Ptiliidae in which they are fused and stated that he considered them 'to form a distinctive group of subfamily rank' and that he had a paper in prep. Later Hall (2005) also supported the erection of a new subfamily, and more recently Sorensson expressed his agreement (Darby 2012) stating that he would write a paper formalising a subfamily which, like the Dybas paper, is still unpublished.

No specimens of *Nossidium*, or of any related genera, have previously been recorded from South America, although Dybas noted a related undescribed species collected by J.F. Lawrence in 1969 on Barro Colorado Island, Panama and another possibly related to the same genus, collected at 7,600 feet elevation on the Volcan Chiriqui in Panama on the Costa Rican border (Dybas 1976).

#### **Materials and Methods**

The specimen was collected by Winkler extraction from siftings of forest leaf litter and subsequently stored in alcohol. Initial studies and photographs were made using a Leica M165C stereo microscope and a Phenom scanning electron microscope. The specimen was then disarticulated and mounted on an acrylic slip as a slide using Euparal as a mountant for more detailed study under an Olympus BH2 compound microscope. Images and measurements were made using the inbuilt software and