

SCIENTIFIC NOTE

Faunistic Records of Proturans from Argentina (Insecta: Protura)

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Registros Faunísticos de Proturos en Argentina (Insecta: Protura)

RESUMEN - *Berberentulus nelsoni* Tuxen, 1976 y *Gracilentulus* sp. son registrados en suelos de Argentina. Estos dos acerenomidos reportados en este trabajo probablemente representan el primer registro de ambas especies para Argentina. Los especímenes fueron colectados en la provincia de Córdoba, durante los meses de noviembre de 2000 y abril de 2001.

PALABRAS-CLAVE: *Berberentulus nelsoni*, *Gracilentulus*, Córdoba, suelo natural

ABSTRACT - *Berberentulus nelsoni* Tuxen, 1976 and *Gracilentulus* sp. are recorded in soils from Argentina. For our knowledge, the two acerenomids reported in this paper represent the first records of both species from Argentina. Specimens were collected in Córdoba province, during the months of November 2000 and April 2001.

KEY WORDS: *Berberentulus nelsoni*, *Gracilentulus*, Cordoba, natural soil

Protura are very small hexapods, from less than 0.5 mm to 2 mm in length, more or less sclerotised (white till yellow, or even brown). The basic systematic of the group was proposed by Tuxen (1964) and recently developed by Yin (1999). Proturan fauna of Argentina has been poorly researched and was unknown until Alzuet *et al.* (1963) who recorded the first species of this order from this country identified as *Acerentulus* sp. The next record was that of Condé (1963) who described "*Acerentulus*" *rapoportii* Condé 1964 (which probably belongs to the genus *Andinentulus* Tuxen, 1984). Najt and Vidal Sarmiento (Najt & Vidal Sarmiento 1970, 1972a,b and Vidal Sarmiento & Najt 1971a,b) described six species: *Proturentomon nitrarius* Najt & V.Sarmiento, 1972, *P. dorae* Najt & V.Sarmiento, 1972, *P. acrasia* V.Sarmiento & Najt, 1971, *Acerentulus nemoralis* Najt & V.Sarmiento, 1970, *Eosentomon alcirae* Najt & V.Sarmiento, 1972, and *E. crassus* V.Sarmiento & Najt, 1971. In 1984, Tuxen added three more species: *Brasilidia sanmartini* Tuxen, 1984, *Andinentulus ebeei* Tuxen, 1984 and *Amphientulus* cf. *ambiguous* (Tuxen, 1967). We (Szeptycki & Bedano 2003) added one more species: *Brasilidia auleta* Szeptycki & Bedano, 2003.

The genera *Gracilentulus* and *Berberentulus* were erected by Tuxen (1963). After the former revisions (Tuxen 1977, 1981) they currently comprise eighteen and eleven species respectively (Szeptycki 2003).

This paper represents the first report of the species *Berberentulus nelsoni* Tuxen, 1976 and *Gracilentulus* sp. and the first report of both genera for Argentina. The collecting site represents the southernmost locality for both taxa in America.

This contribution is based on the study of 19 specimens extracted from natural mollisols during the development of a research project on the soil fauna of Córdoba, Argentina. *B. nelsoni* was found in the upper horizon of natural soils in two localities: Sol de Mayo (33° 20' S.; 64° 18' W.), Córdoba province, Argentina at 400 m a.s.l. and Río de los Sauces (32° 32' S.; 64° 36' W.), Córdoba province, Argentina at 600 m a.s.l. *Gracilentulus* sp. was only found in Río de los Sauces.

Both soils were undisturbed, uncultivated and covered with the typical winter deciduous dry woodland of the Espinal phytogeographical region which has been impoverished by human activities. Dominant arboreal species are *Prosopis* sp. (algarrobo), *Celtis tala* (tala) and *Acacia caven* (espinillo) with grasses intermingled (Cabrera 1976).

Soils were sampled at random by iron shovel and undisturbed samples were transported to laboratory. Extraction of soil fauna was carried out in modified Berlese-Tullgren funnels, during ten days. Samples were stored in 70% ethanol. Later the specimens were mounted on permanent slides using the liquid of Swan. Identification to species was made using the original description (Tuxen 1976) and the keys in Tuxen (1977, 1984).

In materials collected from those soils we found two species new to the country. They are listed below.

Berberentulus nelsoni Tuxen, 1976

MATERIAL EXAMINED. One female, Río de los Sauces, Córdoba Province, 21.IV.2001; eight females and three maturi juniors, Sol de Mayo, Córdoba Province, 11.X.2000. Till now, the species was recorded from Brazil (Tuxen 1976) and from Kermadec Islands (New Zealand) – Tuxen (1986). *Gracilentulus* sp.

MATERIAL EXAMINED. Five females, one maturus junior and one larva I, Sol de Mayo, Córdoba Province, 11.X.2000. The genus *Gracilentulus* sensu Tuxen (1981) is widely distributed in Holarctic Region (Europe, Far East, Northern America) but only few records exist from the Southern Hemisphere (South Africa, Australia, New Zealand – see Tuxen 1986). The data from Neotropical Region (*Gracilentulus tuxeni* Nosek & Hüther, 1974 from Brazil) concern the genus *Baculentulus* Tuxen, 1977 (Tuxen 1977).

All specimens are preserved in the Institute of Systematics and Evolution of Animals P.A.S. (Poland). From the data presented here, it is not possible to establish if *Gracilentulus* sp. is a new species or if it corresponds to one of those previously described in other countries. However, the significance of the finding reported herein is that for the first time the genus *Gracilentulus* has been found in Argentina. Further studies are being developed to determine the taxonomic status of this organism.

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