



## Description of two new species of *Leptinopterus* Hope (Coleoptera: Lucanidae: Lucaninae) with notes on the taxonomy and natural history of the genus

PASCHOAL COELHO GROSSI

Universidade Federal do Paraná, Departamento de Zoologia, Caixa Postal 19007, CEP 81531-980, Curitiba, Paraná, Brazil.  
E-mail: paschoal.grossi@gmail.com

### Abstract

Two new species of *Leptinopterus* are described, both from southern Brazil: *L. asketus* **new species** and *L. assimilis* **new species**. Two **new synonymies** are also made; *L. rotundicollis* Lüderwaldt and *L. luederwaldti* de Moraes are synonymized with *L. tibialis* (Eschscholtz). The correct identities of two unavailable names are discussed: “*L. nitidus* ab. *lepidus*” with *L. affinis* Parry and “*L. elegans* ab. *catharinensis*” with *L. gracilis* Boileau. For the first time, some natural history notes for five species of *Leptinopterus* are reported and some information on their behavior is also given. The identity of *Leptinopterus gracilis* is correctly determined after an examination of a picture of the holotype.

**Key words:** description, *Leptinopterus*, Lucanidae, new species, south Brazil, taxonomy

### Resumo

Duas novas espécies são descritas para o gênero *Leptinopterus*, ambas do Sul do Brasil: *L. asketus* **espécie nova** e *L. assimilis* **espécie nova**. Duas **novas sinônímias** são propostas, *L. rotundicollis* Lüderwaldt e *L. luederwaldti* de Moraes são *sinonimizados com L. tibialis*. A identidade correta de dois nomes inválidos é discutida: “*L. nitidus* ab. *lepidus*” com *L. affinis* Parry e “*L. elegans* ab. *catharinensis*” com *L. gracilis* Boileau. Dados inéditos sobre a história natural de cinco espécies são fornecidos e o seu hábito ilustrado. A identidade de *Leptinopterus gracilis* é corretamente determinada após o exame de uma figura do holótipo.

### Introduction

*Leptinopterus* Hope is the most species-rich genus of the Brazilian lucanids, currently containing 30 described species. All species are known to occur in Brazil, with the distributions of four species extending into Argentina and Paraguay: *L. erythrocnemus* Burmeister, *L. femoratus* (Olivier), *L. paranensis* Parry, and *L. tibialis* (Eschscholtz) (Bruch 1911, Lüderwaldt 1935, Maes 1992, Krajcik 2001). Most *Leptinopterus* species are restricted to southeastern and southern Brazil at high elevations, with the northernmost species found in southern Bahia State. Some species are listed from northern Brazil by Nagel (1924) and Lüderwaldt (1935) but this is probably due to incorrect data.

The genus also contains the largest species of stag beetles in Brazil, with some individuals reaching 55 mm in length. Large males possess very slender and well-developed mandibles that are internally armed with several teeth of various sizes, show marked sexual dimorphism, and have marked allometry. Small males lack some diagnostic characters and their external morphology is more similar to females, especially the head and pronotal punctures, ocular canthi, and labrum. All members of the genus have diurnal habits and have been collected flying or feeding at sap flows of trees and shrubs.