

**A description of the male of *Attagenus* (s. str.) *lepidus*  
Háva & Kovařík, 2004  
(Coleoptera: Dermestidae: Attagenini)**

Andreas HERRMANN<sup>1)</sup>, Jiří HÁVA<sup>2)</sup> & José Manuel BARREDA RIVAS<sup>3)</sup>

<sup>1)</sup>Bremervörder Straße 123, D - 21682 Stade, Germany  
e-mail: herrmann@coleopterologie.de

<sup>2)</sup>Department of Forest Protection and Entomology,  
Faculty of Forestry and Wood Sciences,  
Czech University of Life Sciences,  
Kamýcká 129, CZ-165 00, Prague 6 - Suchbát, Czech Republic  
e-mail: jh.dermestidae@volny.cz

<sup>3)</sup>Caracas, 31, C. P. 41701 Dos Hermanas (Sevilla) Spain  
e-mail: jmbarredaleg@gmail.com

**Taxonomy, description of male, Coleoptera, Dermestidae, Attageninae, *Attagenus*, Morocco**

**Abstract.** *Attagenus lepidus* Háva & Kovařík from Morocco was described in 2004 based a female specimen. The as yet unknown male is described and illustrated here.

INTRODUCTION

Almost 250 different species and/or subspecies of the genus *Attagenus* Latreille, 1802 have been described so far, and 28 of them are recorded from Morocco, all belonging to the subgenus *Attagenus* (s. str.). The aim of the present paper is to describe the morphology of the male of *Attagenus* (s. str.) *lepidus*. So far only a single female of the taxon, the holotype, has been recorded, which was collected in Morocco and described by Háva & Kovařík in 2004. During the examination of some dermestids from Spain and Morocco, sent by the Spanish entomologist José Manuel Barreda Rivas to the first author, small series of the species was detected, including an additional male. Having this opportunity, the authors decided to complete the description of *Attagenus lepidus* by adding the male characteristics.

MATERIAL AND METHODS

The specimens were stored for 5 days in a solution of 1% pepsin in hydrochloric acid to roughly remove protein tissues and make the extremities of the body moveable. The abdomen was disconnected from the body and glued upside-down onto the same cardboard plate, just behind the beetle. Before this, the genitals were excluded and then cleaned with a fine needle in a drop of 99% glycerol. Afterwards, they were also glued onto the plate behind the beetle, firmly embedded in a drop of a solution consisting of polyvinylpyrrolidone, aqua demineralisata and diglycerol (the liquid solution becomes permanently solid after a few minutes). Photos of body and abdomen were taken with a digital SLR camera Sony Alpha 35, connected with an objective Nikon CF N Plan Achromat 4x 160/- and extension rings; for the photos of the genitalia and antenna a Bresser Junior USB-Handmikroskop at magnification 200x was used. Because of the low depth of field, all photos were taken as layered images, afterwards combined by using a PC software. The nomenclature and systematics employed in the present paper follow Háva (2015).

The following measurements were made:

- a) total length (TL) - linear distance from anterior margin of pronotum to apex of elytra.  
 b) pronotal length (PL) - maximum length measured from anterior margin to posterior margin.  
 c) pronotal width (PW) - maximum linear transverse distance.  
 d) elytral length (EL) - linear distance from shoulder to apex of elytron.  
 e) elytral width (EW) - maximum linear transverse distance.

## RESULTS

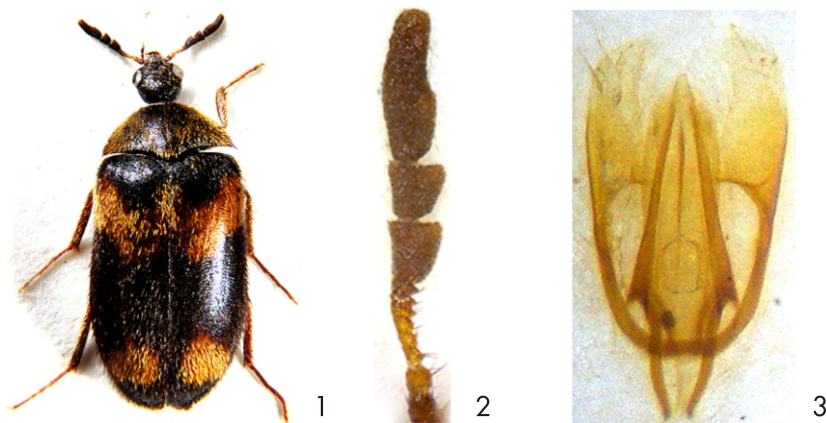
### *Attagenus* (s. str.) *lepidus* Háva & Kovařík, 2004

(Figs. 1-3)

**Material examined.** Three specimens (1 ♂, 2 ♀♀) labelled as follows: "Marruecos, Azrú - Azrou, Bosque de cedros y encinas, 31-V-2017 leg. J. L. Morell". The specimens were captured on a plant, *Euphorbia* sp. growing in a forest of cedars. They are deposited in the collection of the first author.

**Description of male.** Body elongate, measurements (mm): TL 4.5, EL 3.8, PL 0.7, EW 2.3, PW 1.9. Head, pronotum and scutellum black, elytra black with orange fasciae, ventral surfaces black; generally large and elongate; head finely punctate with long intermixed white and black setation; palpi entirely brown; setation on mentum denser; median ocellus on front present; antennae with 11 antennomeres, yellowish brown, the club and the first antennomere darkened; antennal club with 3 antennomeres, the last segment slightly longer than the combination of the two preceding antennomeres (Fig. 2). Pronotum finely punctate like head with long black setation; discally with two small patches with long yellow setation. Scutellum triangular, finely punctate as pronotum, with short black setation. Elytra finely punctate; cuticle black with two yellow-orange bands covered by long yellow setation; other parts with long black setation (Fig. 1). Elytral epipleuron entirely black. Legs brown with yellow setation; metatibiae with short brown thorns. Anterior trochantin less concealed by an auricle-like lobe of hypomeron; lateral regions of prosternum broad, very strongly raised in front of procoxae. Median denticle of prosternum little. Mesosternum and metasternum covered by short yellow setation. Visible ventrites covered by short yellow setation. Male genitalia (Fig. 3).

Variation in size (females): 4.3-4.4 mm.



Figs. 1-3. *Attagenus lepidus* Háva & Kovařík, 2004 (♂): 1-habitus (dorsal aspect); 2-antenna; 3-genitalia.



Fig. 4. Habitat of the species *Attagenus lepidus* Háva & Kovařík, 2004.

**Distribution.** Species known only from Morocco (Háva 2015), new locality data.

ACKNOWLEDGEMENTS. I am obliged very much to all collectors for providing me with the interesting material, to Pavel Krásenský (Czech Republic) for making the photographs, to Lukáš Čížek and Jiří Brestovanský (both Czech Republic) for information about the locality and to all reviewers for revision of the manuscript. The research was supported by the Internal Grant Agency (B0118/004), Faculty of Forestry and Wood Sciences, Czech University of Life Sciences Prague.

## REFERENCES

- FABRICIUS J. C. 1775: *Systema Entomologie, sistens Insectorum classes, ordines, genera, species, adiectis synonymis, locis, descriptionibus, observationibus*. Flensburgi et Lipsiae: Officina Libraria Kortii, xxxii + 832 pp.
- FABRICIUS J. C. 1781: *Species Insectorum exhibentes eorum differentias specificas, synonyma auctorum, loca natalia, metamorphosin adiectis observationibus, descriptionibus. Tomus I.* Hamburgi et Kilonii: C. E. Bohm, viii + 552 pp.
- FÜESSLY [= FUESSLIN] J. C. 1775: *Verzeichnis der ihm bekannten Schweizerischen Insekten mit einer ausgemahlten Kupfertafel: nebst der Ankündigung eines Insecten Werks*. Zürich und Winterthur: Füessly, xii + 62 pp., 1 pl.
- GISTEL J. N. F. X. 1857: *Achthundert und zwanzig neue oder unbeschriebene wirbellose Thiere*. In: *Vacuna oder die Geheimnisse aus der organischen und leblosen Welt. Ungedruckte Originalien-Sammlung von grösstenteils noch lebenden und verstorbenen Gelehrten aus dem Gebiete sämtlicher Naturwissenschaften, der Medizin, Literaturgeschichte, des Forst- und Jagdwesen, der Oekonomie, Geschichte, Biographie, und der freien schönen Künste, herausgegeben von Professor Dr. Johannes Gistel. Zweiter Band*. Straubing: Schorner, 1031 pp. [issued also separately, see above].
- HÁVA J. 2007: Dermestidae pp. 57, 299-320. In: LÖBL I. & SMETANA A. (eds.): *Catalogue of Palaearctic Coleoptera. Volume 4. Elateroidea, Derodontoidea, Bostrichoidea, Lymexyloidea, Cleroidea and Cucujoidea*. Stenstrup: Apollo Books, 935 pp.
- HÁVA J. 2011: *Brouci čeledi: kožojedovití (Dermestidae) České a Slovenské republiky. Beetles of the family Dermestidae of the Czech and Slovak Republics*. Praha: Nakladatelství Academia, 104 pp. (in Czech and English).
- HÁVA J. 2015: *World Catalogue of Insects. Volume 13. Dermestidae (Coleoptera)*. Leiden/Boston: Brill, xxvi + 419 pp.
- HÁVA J., HERRMANN A. & KADEJ M. 2015: New Faunistic Records of Dermestidae (Coleoptera) - Part 14. *Euroasian*

*Entomological Journal* 14(6): 568-570.

MIKLÍN J. & ČÍŽEK L. 2014: Erasing a European biodiversity hot-spot: Open woodlands, veteran trees and mature forests succumb to forestry intensification, succession, and logging in a UNESCO Biosphere Reserve. *Journal for Nature Conservation* 22: 35-41.

SCHÖNHERR C. J. 1808: *Synonymia Insectorum, oder: Versuch einer Synonymie Aller bisher bekannten Insecten; nach Fabricii Systema Eleutheratorum &c. geordnet. Mit Berichtigungen und Anmerkungen, wie auch Beschreibungen neuer Arten und illuminirten Kupfern. Erster Band. Eleutherata oder Käfer. Zweiter Theil.* Stockholm, F. C. Marquard, ix + 423 pp., pl. IV.

SCOPOLI I. A. 1772: *Annus V. Historico-Naturalis*. Lipsiae: Christ. Gottlob Hilscher, 128 pp.

ZAHRADNÍK P. & HÁVA J. 2014: Catalogue of the world genera and subgenera of the superfamilies Derodontoidea and Bostrichoidea (Coleoptera: Derodontiformia, Bostrichiformia). *Zootaxa* 3754: 301-352.

ZHANTIEV R. D. 2009: Novye i maloizvestnye vidy zhukov-kozheedov (Coleoptera, Dermestidae) iz Kavkaza. [New and little-known dermestid-beetles (Coleoptera, Dermestidae) from the Caucasus.] *Zoologicheskij Zhurnal* 88: 1402-1405 (in Russian, English summary).

*Published: 31. 7. 2018*