

**Supplement to the revision of genera *Leianisorhynchus* and *Altonomus*, with
description of *Altonomus rahmei* sp. n. from Syria (Coleoptera: Curculionidae:
Entiminae: Cyphicerini)**

**Dodatek k revizi rodů *Leianisorhynchus* a *Altonomus*, s popisem druhu *Altonomus
rahmei* sp. n. ze Syrie (Coleoptera: Curculionidae: Entiminae: Cyphicerini)**

Roman BOROVEC

Sloupno 64, CZ-503 53 Smidary, Czech Republic; e-mail: romanborovec@mybox.cz

**Taxonomy, systematics, Coleoptera, Curculionidae, Entiminae, new species, new synonym, Palearctic region,
Turkey, Syria**

Abstract. Following the examination of the holotype of *Otiorhynchus* (*Arammichnasus*) *laministrois* Reitter, 1912, the monotypic subgenus *Arammichnasus* Reitter, 1912, is synonymised with *Leianisorhynchus* Pic, 1905, and *O. laministrois* is transferred to this genus as a valid species, *Leianisorhynchus laministrois* (Reitter, 1912), comb. n. Moreover, *Altonomus rahmei* sp. n. from Syria is described. New data on the distribution of *Leianisorhynchus wittmeri* (Pesarini, 1971) and *Altonomus modestus* (Iablokoff-Khnzorian, 1957) are presented, including data on host plants.

INTRODUCTION

The purpose of this paper is to update my revision of the genera *Gyratogaster* K. Daniel et J. Daniel, 1903, *Leianisorhynchus* Pic, 1905, and *Altonomus* Desbrochers, 1907 (Borovec 2003). This update is necessitated by the discovery of a new *Altonomus* species in Syria, and a detailed study of the description and type material of *Otiorhynchus laministrois* Reitter, 1912.

Reitter (1912) described a new subgenus, *Arammichnasus*, contemporaneously with *O. laministrois*. *Arammichnasus* contained only this newly described species, based on rostral characters very typical for the tribe Cyphicerini Lacordaire, 1863, and the subtribe Mylacorrhinina Reitter, 1913, as redefined by Borovec (2003). While studying Reitter's (1912) original description, I discovered characters typical for the genera mentioned above in. Study of the holotype confirmed that *O. laministrois* must be transferred to *Leianisorhynchus*. As it is also the type species of a monotypic subgenus, *Arammichnasus*, this subgenus becomes a junior synonym of *Leianisorhynchus*.

MATERIAL AND METHODS

Examined specimens were measured in lateral view from the anterior margin of eye to the apex of elytra. Dissected female genitalia were embedded in a glue (Solakryl) and male genitalia were mounted dry on the same card as the respective specimen. The terminology of rostrum follows Oberprieler (1988), the terminology of female genitalia follows Borovec (2006). Original label data are recorded in the text.

The material is housed in the following collections (identified by codens): APO – coll. Attila Podlussány, Budapest; ECO – coll. Enzo Colonnelli, Roma; HNHM – coll. Természettudományi Múzeum, Budapest; JFR – coll. Jan Fremuth, Hradec Králové; LGU – coll. Levent Gültekin, Erzurum; RBO – coll. Roman Borovec, Sloupno.

RESULTS

Taxonomic part

Leianisorhynchus laminirostris (Reitter, 1912), **comb. n.** (Figs 1-4)

Otiorrhynchus (*Arammichnasus*) *laminirostris* Reitter, 1912: 66.

Otiorrhynchus (*Arammichnasus*) *laminirostris*: Magnano, 1998: 65; Alonso-Zarazaga & Lyal, 1999: 168.

Leianisorhynchus sp.: Borovec, 2003: 18.

Type material examined. Reitter (1912) based this species and subgenus on one specimen from “Asia minor, Kilikischer Taurus, von Herrn A. Kricheldorf erhalten”. The holotype of this species is housed in HNHM, and I have examined it. It is a well-preserved female that agrees with the original description. It bears the following labels: Kilik. Taurus, Asia Minor, A. Kricheldorff [printed] / Coll. Reitter [printed] / Holotypus 1912, *Otiorrhynchus laminirostris* Reitter [orange margins, handwritten, not original label] / *Arammichnasus* (m.) *laminirostris* m. 1912 [Reitter’s handwriting] / HOLOTYPUS *Otiorrhynchus laminirostris* Reitter, R. Borovec vid. 2006 [red, printed] / *Leianisorhynchus laminirostris* (Reitter), R. Borovec det. 2006 [printed].

The holotype undoubtedly belongs to the genus *Leianisorhynchus*; it has an extremely large frons, rostrum separated from the rest of head by a deep transversal depression, and extremely long nodulus of spermatheca. The monotypic subgenus *Arammichnasus* Reitter, 1912, of the genus *Otiorrhynchus* Germar, 1824, is thus here synonymised with *Leianisorhynchus* Pic, 1905, **syn. n.**

Additional material examined. 1 ♀, Turkey s.e., Gülek, 21.v.1995, T. Rybárik lgt. (JFR).

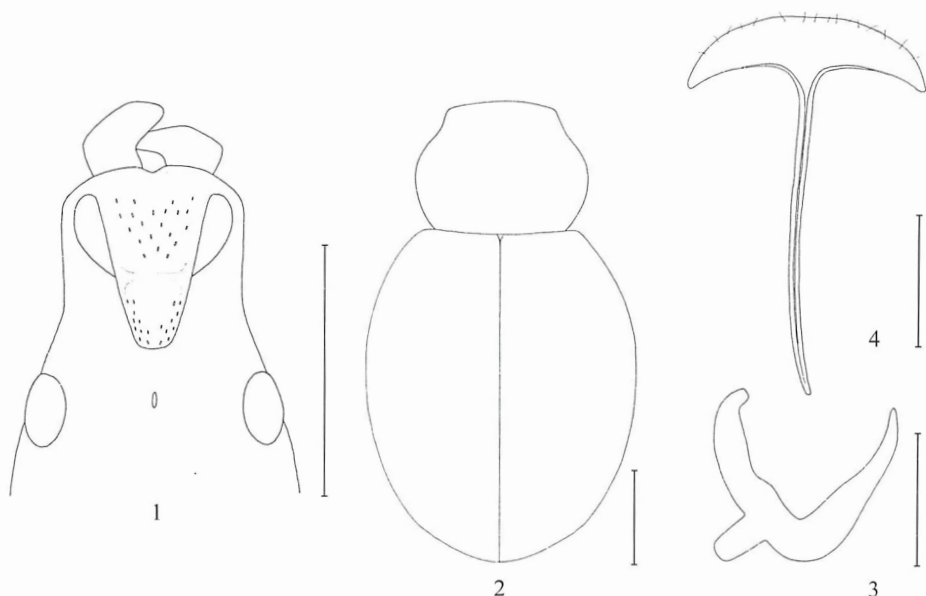
Redescription. Body length (rostrum excluded): holotype 5.00 mm, female from Gülek 5.13 mm.

Body blackish, legs and antennae dark brownish. Each elytral intervals with one row of whitish, adherent, piliform setae, somewhat shorter than half of width of interval. Pronotum very sparsely covered with identical setae with apices pointing transversally, directed towards midline, somewhat more dense in lateral parts. Head including rostrum with vestiture similar as on pronotum but with significantly shorter setae.

Rostrum 1.22-1.25 times as wide as long, widest at base, in basal 0.25 tapering anteriorly, in apical 0.75 very feebly enlarged anteriorly, with feebly concave sides. Frons V-shaped, very large and conspicuous, reaching almost anterior margin of eyes, strongly elevated from rostrum, shiny, shallowly depressed, with several very fine punctures. Rostrum vaulted, visibly separated dorsally from rest of head by deep transversal depression. Eyes small, almost flat, hardly protruding from outline of head (Fig. 1).

Antennal scape reaching anterior margin of pronotum, very slender, visibly enlarged just in apical portion. Funicle slender and long. Antennomere 1 2.3 times as long as wide, antennomere 2 twice as long as wide, antennomeres 4 and 5 1.3 times as long as wide, antennomere 5 1.1 times as long as wide, antennomere 6 isodiametric, antennomere 7 1.3 times as wide as long.

Pronotum 1.29-1.33 times as wide as long, widest in posterior third, with strongly rounded sides, anteriorly more tapered than posteriorly, behind anterior margin feebly constricted, regularly vaulted (Fig. 2). Dorsal surface shiny, scarcely and finely punctate, punctures separated by more than their diameter.



Figs 1-4. *Leianisorhynchus laminirostris* (Reitter), holotype: 1 – head including rostrum in dorsal view; 2 – pronotum and elytra in dorsal view. Scale = 1.00 mm; 3 – spermatheca; 4 – sternum 8. Scale = 0.25 mm.

Obr. 1-4. *Leianisorhynchus laminirostris* (Reitter), holotypus: 1 – hlava včetně nosce, pohled svrchu; 2 – štít a krovky, pohled svrchu. Měřítka = 1,00 mm; 3 – spermatéka; 4 – 8. sternit. Měřítka = 0,25 mm.

Elytra oval, 1.17-1.24 times as long as wide, striae finely punctate, intervals very wide and flat (Fig. 2).

All femora inermis. Protibia in apical part strongly enlarged outside. Protarsus somewhat more robust than metatarsus. Protarsomere 2 as long as wide, protarsomere 3 1.2 times as wide as long, ungular protarsomere 1.3 times as long as previous one. Metatarsomere 2 1.3 times as long as wide, metatarsomere 3 as long as wide, ungular metatarsomere 1.5 times as long as metatarsomere 3. Claws free.

Female genitalia. Sternum 8 with very wide and short plate, translucent except of well developed margo basalis (Fig. 4). Spermatheca with extremely long, feebly curved nodulus, significantly longer than short ramus. Cornu pointed (Fig. 3).

Male unknown.

Differential diagnosis. Easily distinguished from both known species of the genus – *L. brunescens* Pic, 1905, and *L. wittmeri* (Pesarini, 1971) – by the lack of conspicuous semierect setae on the elytra, pronotum and head.

Altonomus rahmei sp. n.

(Figs 5-10)

Type material. Holotype: ♀, Syria mer., muh. Dimashq, 3 km NE Blouda, 1970 m, N 33 45 188, E 36 09 053, 30.04.2005, N. Rahmé, A. Márkus, A. Kotán & A. Podlussány leg. (APO). Paratypes: 17 ♀♀, same data as holotype (15 ♀♀ APO, 2 ♀♀ RBO).

Description. Body length (rostrum excluded): 2.23-3.00 mm (in holotype 2.23 mm).

Body blackish, anterior border of pronotum and frons lighter, brownish. Legs and antennae light reddish brown, femora sometimes darker, dark brownish. Elytra on each interval with (1) one regular row of very long, raised, brown greyish, piliform setae (Figs 5, 8), longer than width of interval and (2) about five irregular rows of adherent, piliform, bronze setae, shorter than half of length of raised setae (Fig. 5). Three outer intervals and environs of scutellum with visibly denser adherent setae than disc of elytra. Pronotum and head including rostrum with semierect, piliform, bronze setae. Setae on pronotum with apices pointing transversally directed towards midline and somewhat longer than setae on head. Only adherent setae on outer elytral intervals partly covering the integument, all other parts of body integument well visible (Fig. 5).

Rostrum 1.31-1.36 times as wide as long, in dorsal view in basal part tapered anteriorly with feebly concave sides, in apical part with strongly rounded sides, arched with lateral margins of scrobes. Rostrum in lateral view regularly vaulted. Scrobes in dorsal view pit-shaped, well visible, in lateral view feebly curved, directed to eye, ventral border of scrobe directed towards ventral margin of eye. Epifrons with ill-defined margins, narrower than half of width of rostrum. Frons V-shaped, reaching posterior margin of scrobes, shiny, shallowly depressed, with several fine, longitudinal striae. Eyes small, flat, not protruding from outline of head (Figs 5, 6). Head and rostrum shiny, with sparse fine punctures, interocular space with one small fovea.

Antenna slender. Scape long, slender, significantly exceeding anterior margin of pronotum, visibly curved in middle, enlarged at apical part. Funicle slender. Antennomere 1 1.7-1.8 times as long as wide, somewhat longer than antennomere 2 which is 1.5-1.6 times as long as wide; antennomeres 3-5 isodiametric; antennomeres 6 and 7 1.3-1.4 times as wide as long.

Pronotum 1.35-1.40 times as wide as long, widest in posterior third, with strongly rounded sides, anteriorly more tapered than posteriorly, regularly vaulted (Figs 5, 7). Pronotum shiny, regularly punctured, punctures larger than punctures on head, intervals between two punctures equal to their diameter.

Scutellum small, hardly visible.

Elytra oval, 1.18-1.22 times as long as wide, much wider than pronotum (Figs 5, 7). Striae punctate, intervals wide, flat, strongly shiny.

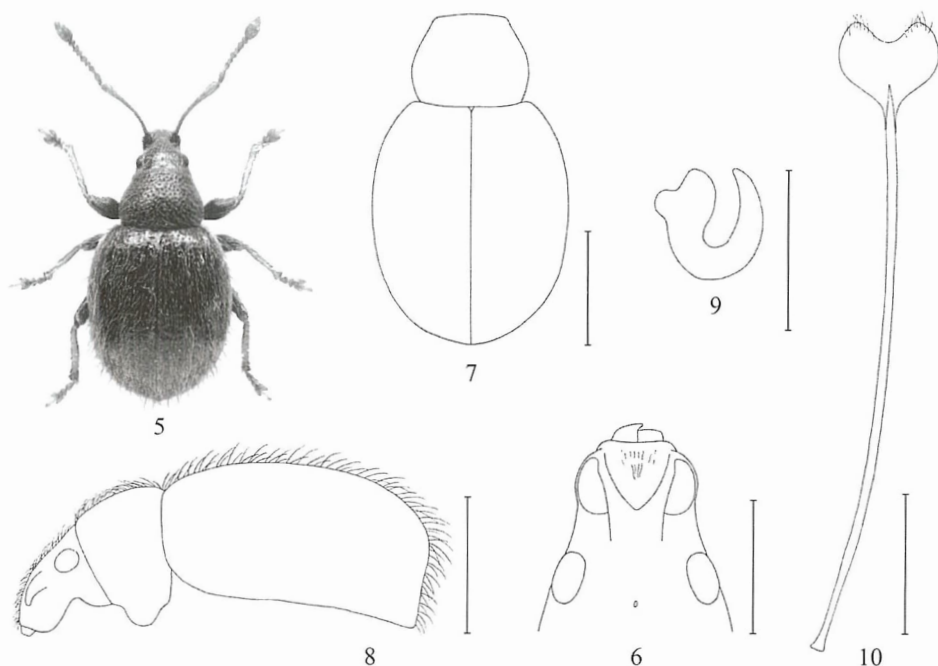
All femora inermis. Tibiae long and slender. Protibia in apical part obliquely subtruncate with a fringe of fine, long, yellow setae, gently enlarged outside. Mesotibia with one, metatibia with two short and fine spines at inner side. Protarsus more robust than metatarsus. Protarsomere 2 1.8-2.0 times as wide as long, protarsomere 3 1.3 times as wide as long, and as long as ungular one. Metatarsomere 2 1.6-1.7 times as wide as long, metatarsomere 3 1.1 times as wide as long, and as long as ungular one. Claws free.

Female genitalia. Plate of sternum 8 small, heart-shaped with strikingly concave anterior margin, apodeme very long, 6 times as long as plate (Fig. 10). Spermatheca with short and wide ramus and nodulus and long, slender cornu (Fig. 9).

Male unknown.

Collection circumstances. All type material was collected by hand from leaves of *Cirsium lappaceum* in strong wind at a temperature below 10°C (A. Podlussány, pers. comm.).

Etymology. This new species is dedicated with great pleasure to Nikola Rahmé, Hungarian specialist in Buprestidae, who collected the first specimens of this species during a trip to Syria.

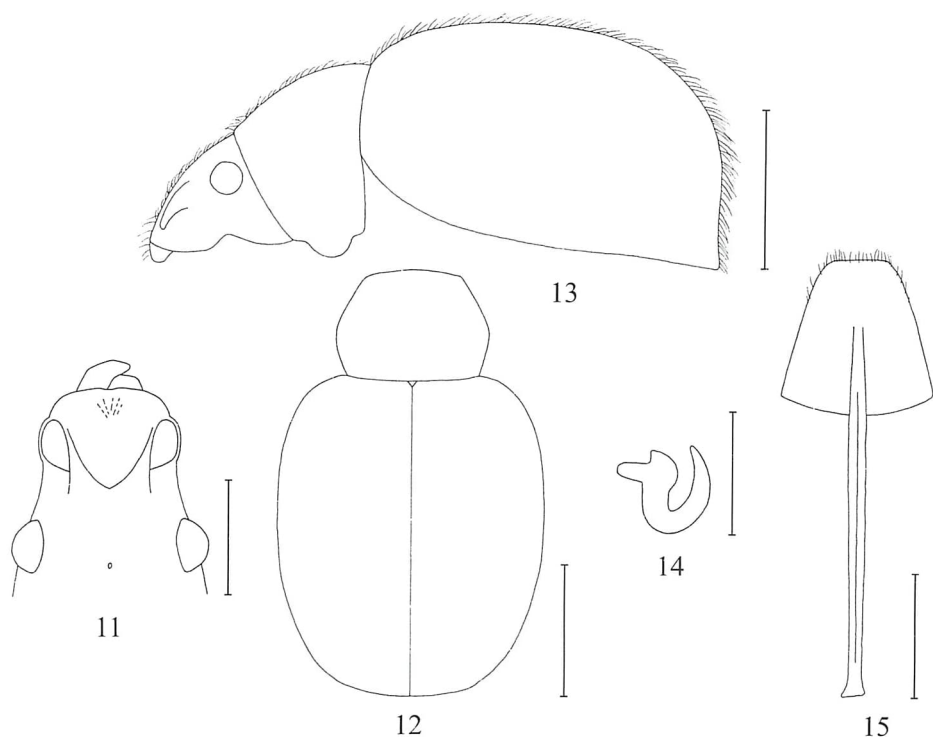


Figs 5-10. *Altonomus rahmei* sp. n., paratype: 5 – habitus; 6 – head including rostrum in dorsal view. Scale = 0.50 mm; 7 – pronotum and elytra in dorsal view; 8 – head including rostrum, pronotum and elytra in lateral view. Scale = 1.00 mm; 9 – spermatheca; 10 – sternum 8. Scale = 0.25 mm.

Obr. 5-10. *Altonomus rahmei* sp. n., paratype: 5 – celkový vzhled; 6 – hlava včetně nosce, pohled svrchu. Měřítka = 0,50 mm; 7 – štít a krovky, pohled svrchu; 8 – hlava včetně nosce, štít a krovky, boční pohled. Měřítka = 1,00 mm; 9 – spermatéka; 10 – 8. sternit. Měřítka = 0,25 mm.

Differential diagnosis. *Altonomus rahmei* sp. n. is very similar to *A. vernalis* (Iablokoff-Khnzorian, 1957) by having raised and adherent setae on the elytra and the ventral border of scrobe directed towards the ventral margin of eye. All other *Altonomus* species have different elytral vestiture, mostly with adherent or semierect setae, and the ventral border of scrobe directed below the ventral margin of eye (cf. Borovec 2003). *Altonomus rahmei* sp. n. is easily distinguished from *A. vernalis* by the following set of characters:

1. Larger species, body length 3.1-3.4 mm. Elytral raised setae as long as width of one interval (Fig. 13). Frons large, exceeding posterior border of scrobes, flat, with several small punctures. Eyes convex, visibly protruding from outline of head (Fig. 11). Ungular metatarsomere in females 1.8 times as long as tarsomere 3. Elytra larger in comparison to pronotum (Fig. 12). Plate of sternum 8 in female trapezoidal, apodeme twice as long as plate (Fig. 15). Spermatheca with long ramus (Fig. 14). Armenia. *A. vernalis* (Iablokoff-Khnzorian)
- Smaller species, body length 2.2-3.0 mm. Elytral raised setae longer than width of one interval (Fig. 8). Frons small, reaching posterior border of scrobes, shallowly depressed, with fine longitudinal striae. Eyes flat, not protruding from outline of head (Fig. 6). Ungular metatarsomere in females as long as tarsomere 3. Elytra smaller in comparison to pronotum (Fig. 7). Plate of sternum 8 in female heart-shaped, apodeme 6 times as long as plate (Fig. 10). Spermatheca with short ramus (Fig. 9). Syria. *A. rahmei* sp. n.



Figs 11-15. *Altonomus vernalis* (Iablokoff-Khnzorian), paratype: 11 – head including rostrum in dorsal view. Scale = 0.50 mm; 12 – pronotum and elytra in female, dorsal view; 13 – head including rostrum, pronotum and elytra in lateral view. Scale = 0.50 mm; 14 – spermatheca; 15 – sternum 8 in female. Scale = 0.25 mm. Figs 11, 13-15 adopted from Borovec (2003).

Obr. 11-15. *Altonomus vernalis* (Iablokoff-Khnzorian), paratypus: 11 – hlava včetně nosce, pohled svrchu. Měřítka = 0,50 mm; 12 – štít a krovky samice, pohled svrchu; 13 – hlava včetně nosce, štít a krovky, boční pohled. Měřítka = 0,50 mm; 14 – spermatéka; 15 – 8. sternit samice. Měřítka = 0,25 mm. Obr. 11, 13-15 převzaty z Borovce (2003).

Faunistic part

This part presents new records of two species that were so far known only from type specimens and one more single specimen (Borovec 2003).

Altonomus modestus (Iablokoff-Khnzorian, 1957)

2 ♀♀, Turkey, Erzurum prov., 8.5 km S of Çat, 1900 m, 22.v.2002, *Centaurea solstitialis*, L. Gültekin lgt. (LGU, RBO); 4 ♀♀, Turkey, Erzurum prov., 14 km NE of Aşkale, Pirnakapar Vil, 1750 m, 15.v.2002, *Centaurea solstitialis*, L. Gültekin lgt. (LGU, RBO); 2 ♀♀, Turkey, Erzurum, 2 km NE of Yedisu, 28.iv.2004, N 35 34 94, E 40 54 21, 1270 m, *Centaurea solstitialis*, E. Colonnelli lgt. (ECO).

Leianisorhynchus wittmeri (Pesarini, 1971)

1 ♀, Turkey, vill. Adana, Pozanti, 20.v.1995, J. Mertlik lgt. (RBO).

Bionomic data

No host plant or any relationship to any plant has been known in the genus *Altonomus* (Borovec 2003). Newly collected specimens of this genus were collected exclusively on plants from the family Asteraceae. E. Colonnelli and L. Gültekin (pers. comm.) collected *A. modestus* (together with another very seldom short-nosed weevil *Araxia mucronata* Iablokoff-Khnzorian, 1957) on *Centaurea solstitialis*, and all type material of *A. rahmei* sp. n. was collected from leaves of a *Cirsium lappaceum* plant.

ACKNOWLEDGMENTS. It is my pleasant duty to thank the following colleagues who kindly made valuable specimens available for this study: E. Colonnelli, Roma; L. Gültekin, Erzurum; O. Merkl, HNHM; J. Mertlik, Opatovice nad Labem, and A. Podlussány, Budapest. Nikola Rahmé (Budapest) is acknowledged for the habitus photograph of *Altonomus rahmei* sp. n. Special thanks are due to J. Vitner (Praha) and D. Boukal (České Budějovice) for critical comments on the manuscript.

REFERENCES

- ALONSO-ZARAZAGA M. A. & LYAL C. H. C. 1999: *A world catalogue of families and genera of Curculionoidea (Insecta: Coleoptera) (Excepting Scolytidae and Platypodidae)*. Entomopraxis S.C.P. Edition, Barcelona, 315 pp.
- BOROVEC R. 2003: Revision of genera *Gyratogaster*, *Leianisorhynchus* and *Altonomus* (Coleoptera: Curculionidae: Entiminae: Cyphicerini). *Klapalekiana*, 39: 1-30.
- BOROVEC R. 2006: Taxonomic notes on the tribe Omiini, with description of one new genus and species, and with revision of genera *Anemophilus* and *Euplatus* (Coleoptera: Curculionidae: Entiminae). *Klapalekiana*, 42: 1-44.
- MAGNANO L. 1998: Notes on the *Otiiorhynchus* Germar, 1824 complex (Coleoptera: Curculionidae), pp. 51-80. In: COLONNELLI E., LOUW S. & OSELLA G. (eds.): *Taxonomy, ecology and distribution of Curculionidea (Coleoptera: Polyphaga). Proceedings of a Symposium (28 August, 1996, Florence, Italy) XX International Congress of Entomology*. Atti del Museo Regionale di Scienze Naturali, Torino, 294 pp.
- OBERPRIELER R. G. 1988: Revision of the Tanyrhynchini of continental Africa (Coleoptera: Curculionidae). 1. Introduction and review of the genera, revision of the genus *Brachytrachelus* Schönherr and description of *Afroleptops* gen. nov. *Entomology Memoir of Department of Agriculture and Water Supply*, 71: 1-50.
- REITTER E. 1912: Übersicht der Untergattungen und der Artengruppen des Genus *Otiiorhynchus* Germ. (Bestimmungstabelle nr. 66). *Wiener Entomologische Zeitung*, 31: 45-67.

SOUHRN

Reitter (1912) popsal nový druh *Otiiorhynchus laminirostris* a na základě velmi charakteristických znaků na nosci zařadil tento druh do nově popsaného podrodu *Arammichnasus*. Znaky tohoto podrodu – velká apikální plocha nosce, nosec oddělený od hlavy hlubokou příčnou rýhou a extrémně dlouhý nodulus spermatéky – jsou znaky typické pro rod *Leianisorhynchus* Pic, 1905 (tribus Cyphicerini Lacordaire, 1863, subtribus Mylacorrhinina Reitter, 1913). Na základě studia holotypu je druh *Otiiorhynchus laminirostris* Reitter, 1912 v této práci nově zařazen do rodu *Leianisorhynchus* a monotypický podrod *Arammichnasus* rodu *Otiiorhynchus* Germar, 1822 (tribus Otiiorhynchini Schoenherr, 1826) je synonymizován s rodem *Leianisorhynchus*.

Současně je zde ze Sýrie popsán nový druh *Altonomus rahmei* sp. n., velmi podobný druhu *A. vernalis* (Iablokoff-Khnzorian, 1957). Od tohoto druhu se liší následujícími znaky:

1. Větší druh, délka těla 3,1-3,4 mm. Odstávající chlupy na krovkách stejně dlouhé jako šířka krovečných mezirýží (obr. 13). Vrchní plocha nosce velká, plochá, s několika malými jamkami, přesahuje zadní okraj tykadlových rýh. Oči klenuté, viditelně vystupují z obrysu hlavy (obr. 11). Poslední článek chodidel u samic 1,8 x delší než třetí chodidlový článek. Krovky větší v poměru ke štítu (obr. 12). Deska 8. sterna samic lichoběžníkovitá, apodema 2x delší než deska (obr. 15). Ramus spermatéky dlouhý (obr. 14). Arménie. *A. vernalis* (Iablokoff-Khnzorian)
- Menší druh, délka těla 2,2-3,0 mm. Odstávající chlupy na krovkách delší než šířka krovečných mezirýží (obr. 8). Vrchní plocha nosce malá, mělce prohloubená, s jemnými podélnými rýžkami, dosahuje k zadnímu okraji tykadlových rýh. Oči ploché, nevystupují z obrysu hlavy (obr. 6). Poslední článek chodidel stejně dlouhý jako třetí chodidlový článek. Krovky menší v poměru ke štítu (obr. 7). Deska 8. sterna samic srdčitá, apodema 6x delší než deska (obr. 10). Ramus spermatéky krátký (obr. 9). Sýrie. *A. rahmei* sp. n.

Práce je doplněna novými faunistickými a bionomickými daty. U druhů *Altonomus modestus* (Iablokoff-Khnzorian, 1957) a *Leianisorhynchus wittmeri* (Pesarini, 1971), které byly dosud známy jen z typového materiálu a jednoho dalšího exempláře, jsou uvedeny nové nálezy z Turecka. U rodu *Altonomus* dosud nebyla známa živná rostlina, ani data o sběru z konkrétního druhu rostlin. Nově sbíraný materiál byl sbírán výhradně na rostlinách čeledi Asteraceae. E. Colonnelli a L. Gültekin (osobní sdělení) sbírali druh *Altonomus modestus* na chrpě *Centaurea solstitialis*. Veškerý typový materiál druhu *A. rahmei* sp. n. byl sbírán na listech pcháče *Cirsium lappaceum*.