Published November 10, 2009 Klapalekiana, **45**: 67–72, 2009
ISSN 1210-6100

Two new species of the genus *Hesperus* (Coleoptera: Staphylinidae: Philonthina) from the Afrotropical region

Dva nové druhy rodu *Hesperus* (Coleoptera: Staphylinidae: Philonthina) z Afrotropické oblasti

Lubomír HROMÁDKA

Anny Letenské 7, CZ-120-00 Praha 2, Czech Republic; e-mail: hromadkal@seznam.cz

Taxonomy, new species, Coleoptera, Staphylinidae, Philonthina, *Hesperus*, Afrotropical region

Abstract. Two new species of the genus *Hesperus* Fauvel, 1874 from Democratic Republic of the Congo (*H. anas* sp. n.) and Republic of South Africa (*H. mylomys* sp. n.) are described and compared with closely related species.

INTRODUCTION

The genus *Hesperus* Fauvel, 1874 belongs to the tribe Staphylinini. It is distributed in all zoogeographical regions (except Madagascar) and contains 201 species. Only Bernhauer (1915, 1928) and Scheerpeltz (1956, 1971) dealt with the taxonomy of *Hesperus* in the Afrotropical region and altogether described 25 species from the area (Herman 2001).

Description. The genus was characterized in detail by Smetana (1995: 486): 'Body usually more or less parallel-sided, sometimes large and robust. Head and pronotum glabrous, but with large setiferous punctures, head with distinctly punctate and pubescent tempora; or, more commonly, variably punctate and pubescent except for vertex of head and middle portion of pronotum; surface usually with microsculpture; elytra variably punctate and pubescent, surface between punctures without microsculpture; abdominal tergites variably punctate and pubescent; surface with exceedingly fine and dense microsculpture of transverse striae'.

MATERIAL AND METHODS

All specimens studied are deposited in the following collections:

LHPC – private collection of Lubomír Hromádka, Praha;
MNUB – Museum der Alexander-Humboldt-Universität, Berlin, Germany (Manfred Uhlig);
MRAT – Musee Royal de L'Afrique centrale, Tervuren, Belgium (Marc de Meyer).

The following abbreviations are used in the descriptions: L = length, W = width. All measurements were taken with extended abdomen. The ratios mentioned in the descriptions can be converted to lengths as 20 units = 1 mm.

TAXONOMIC PART

Hesperus anas sp. n.
(Figs 1–6)

Type material. Holotype ♂, labelled: Democratic Republic of the Congo, Massif Ruwenzori, Kalonge, 2.100 m, Riv. Nyamwamba, aff. Butahu, ('Congo Belge'): P.N.A., 25.-27.-viii.-1952, P. Vanschuytbroeck & J. Kekenbosch 902-03 // HOLOTYPUS *Hesperus anas* sp. n.

Hromádka det. [red oblong label, printed] (MRAT). Paratypes: 1 ♂, with the same locality data as in holotype (LHPC); 2 spec., Massif Ruwenzori, Kalonge, 2180 m, Riv. Katauleko, aff. Butahu, Congo Belge: P.N.A. 2.-x.-1952, P. Vanschuytbroeck & J. Kekenbosch 1126 (MRAT); 3 spec., Massif Ruwenzori Kalonge, 2060 m, Katauleko, aff. Butahu, Congo Belge: P. N. A., 28.-29.-vii.-1952, P. Vanschuytbroeck & J. Kekenbosch 531-86 (LHPC, MRAT) (All paratypes with red oblong labels, printed).

Description. Body length 14.5-16.6 mm, length of fore body (to end of elytra) 7.1-8.5 mm. Head and scutellum black, maxillary and labial palpi yellowish brown, antennae and mandibles black, pronotum black, with dark golden lustre, elytra reddish brown, suture narrowly darker, abdomen black, posterior half of tergite 7 and entire tergite 8 dirty yellow, legs yellowish brown.

Head almost square, wider than long (W/L ratio = 67/61), parallel-sided, posterior angles slightly rounded, eyes flat, much shorter than temples (ratio of eye length/temple length = 15/32). Clypeus medially with wide and relatively shallow depression. Entire head rather conspicuously, irregularly, sparsely punctate, except for impunctate area on disc. Surface without microsculpture. Mandibles very long.

Antennae reaching posterior third of pronotum when reclined. Antennomeres 1-5 and 11 longer than wide, antennomeres 6-10 as long as wide. Antennomere 1 much longer than antennomere 11, antennomere 3 longer than antennomere 2. Relative lengths of antennomeres 1-11: 23-10-13-8-8-7-7-7-7-6-9.

Pronotum as long as wide, distinctly narrowing posteriorly, sides sinuate. Anterior angles almost rectangular, with several variably long black bristles, posterior angles bluntly rounded. Posterior margin straight. Each dorsal row with 12-14 punctures. Pronotum with broad impunctate midline. Sides with many variably spaced punctures. Surface without microsculpture.

Entire scutellum very densely and coarsely punctate. Punctures much larger than eye facets, distance between punctures much smaller than their diameter.

Elytra slightly longer than wide (L/W ratio = 88/82), slightly widened posteriad. Punctation fine and dense, punctures smaller than those on scutellum, separated by 1-1.5 puncture diameters in transverse direction. Surface between punctures without microsculpture; setation yellowish.

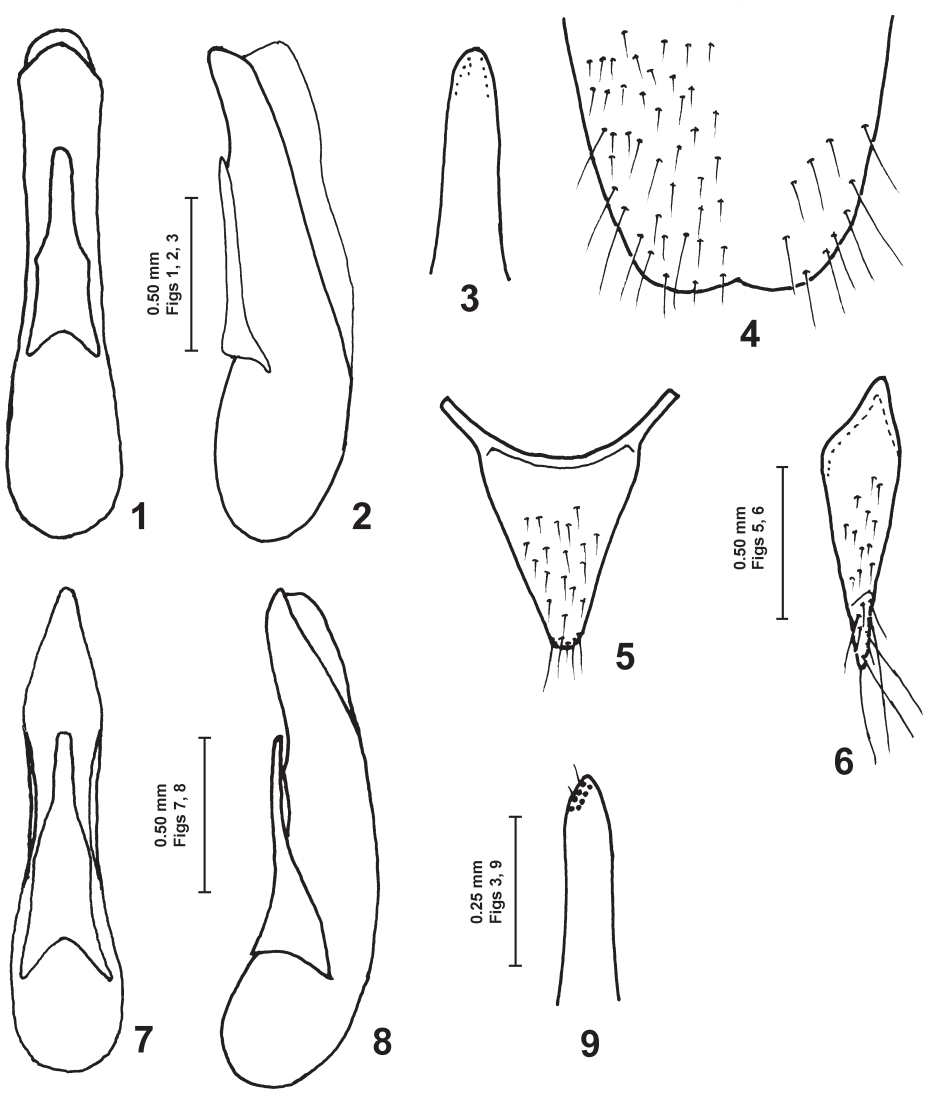
Legs: metatibia longer than metatarsus (ratio metatarsomere 1 longer than metatarsomere 5. Relative length of metatarsomeres 1-5: 13-7-6-5-10.

Abdomen wide, parallel-sided, from tergite 6 very slightly narrowed towards apex. Punctation much coarser than that on elytra, gradually becoming slightly sparser towards apex of each tergite. Surface without microsculpture; setation similar to that on elytra.

Male. Protarsomeres 1-4 only slightly dilated and sub-bilobed, each covered with modified pale setae ventrally. Aedeagus (Figs 1-3) elongate, parallel-sided, with triangular apex, paramere with apical portion parallel-sided, narrowed before apex, distinctly not reaching apex of median lobe, sensory peg setae on underside of paramere arranged along apical margin. Ventrite 8 (Fig. 4) with a very shallow, obtusely angulate medio-apical emargination.

Female. Protarsomeres 1-4 similar to those of male except slightly less dilated, tergite 10 as in Fig. 5, with numerous fine setae. Genital segment with gonocoxites as in Fig. 6.

Differential diagnosis. This new species is very similar to *M. addisadebaensis* Scheerpeltz, 1971 (Figs 7-9). I have seen the following specimens of *H. addisadebaensis*: 8 spec., KENYA-Western, Kakamega Forest N.R., env. Udas Campsite, 0.21N/34.51E, 1600 m, 27.-29.ix.2001,



Figs 1-9. 1-6: *Hesperus anas* sp. n.: 1 – aedeagus, ventral view; 2 – aedeagus, lateral view; 3 – apex of paramere with sensory peg setae; 4 – apical portion of male ventrite 8; 5 – female tergite 10; 6 – gonocoxite of female genital segment; 7-9: *H. addisadebaensis* Scheerpeltz: 7 – aedeagus, ventral view; 8 – aedeagus, lateral view; 9 – apex of paramere with sensory peg setae.

Obr. 1-9. 1-6: *Hesperus anas* sp. n.: 1 – aedeagus, ventrální strana; 2 – aedeagus, laterální strana; 3 – apikální část spodní strany paramery se smyslovými sensilami; 4 – apikální část 8. ventritu; 5 – 10. tergit samice; 6 – gonocoxit, zadečkový segment samice; 7-9: *H. addisadebaensis* Scheerpeltz: 7 – aedeagus, ventrální pohled; 8 – aedeagus, laterální pohled; 9 – apikální část spodní strany paramery se smyslovými sensilami.

light trap, L. Kühne leg. (LHPC, MNUB). *Hesperus anas* sp. n. differs from *H. addisadebaensis* by denser punctation of the head, pronotum and elytra, smaller eyes, dark golden lustre, posteriorly narrowing pronotum (the pronotum of in *H. addisadebaensis* is narrowing anteriorly), coarser and denser punctation of abdomen and different shape of the aedeagus.
Distribution. Democratic Republic of the Congo.
Name derivation. The name of this species, a noun in apposition, is the Latin generic name of the African cape teal *Anas capensis* J. F. Gmelin, 1789.

Hesperus mylomys **sp. n.**
(Figs 10-16)

Type material. Holotype ♂, labelled: R.S.Africa, 30.-xi.-1996, 33°59.0'S/22°40.6'E Cape Prov.: Wilderness NP: Langvlei, Malachite bird hide, Juncus krausi+bush litter sievings, leg. B. + M. Uhlig [red oblong label printed] (MNUB). Paratypes: 1 ♂, Republic of South Africa: 9.-xi.-1997, 34°27.2'S/20°24.2'E, Cape Prov.: De Hoop NR: De Hoop Vlei: Phragmites sievings, leg. M. Uhlig (ZMHB), 1 ♂, 1 ♀, R.S. Africa: 10.-xi.-1997, 34°27.2'S/20°24.2'E, Cape Prov.: De Hoop NR: Carex sievings, leg. M. Uhlig (LHPC, MNUB).
Description. Body length 8.3-9.6 mm, length of fore body (to end of elytra) 4.2-4.7 mm. Head, pronotum, scutellum and abdomen black, elytra purple, maxillary and labial palpi and mandibles brown, antennae brown-black, antennomeres 9-11 brown yellow, legs black brown.

Head square, as long as wide, parallel-sided, posterior angles obtusely rounded. Posterior half including temples coarsely and densely punctate except narrow impunctate midline. Punctures distinctly larger than eye facets, separated by 1-1.5 puncture diameters in transverse direction. Eyes small and flat, distinctly shorter than temples (ratio of eye length/temple length = 9/19). Surface with very fine and dense microsculpture consisting of transverse and oblique waves.

Antennae short and stout, reaching midlength of pronotum when reclined, relative length of antennomeres 1-11: 9-5-6-3.5-3-2.5-2.5-2.5-2.5-2.5-4.5.

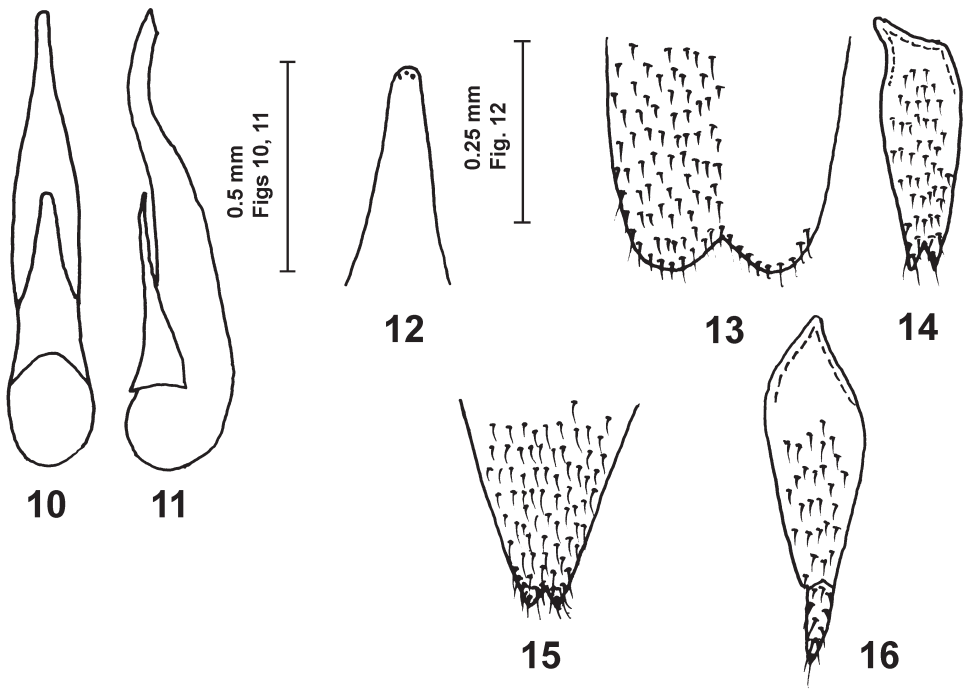
Pronotum wider than long (W/L ratio = 40/38), distinctly narrowing posteriorly, sides sinuate. Posterior angles conspicuously rounded. Pronotum with narrow impunctate midline. Sides very densely and coarsely punctate. Punctures slightly coarser and larger than those on head. Distance between punctures very small. Surface with microsculpture similar to that on head.

Scutellum finely and sparsely punctate, punctures as large as eye facets, surface between punctures with dense isodiametrical microsculpture.

Elytra as wide as long, parallel-sided, very densely, coarsely and wrinkly punctate, all punctures contiguous. Setation dark.

Legs: metatibia longer than metatarsus (ratio of length of tibia/length of tarsus = 32/27). Relative length of metatarsomeres 1-5: 9-5-3.5-3-6.

Abdomen wide, very slightly narrowed towards apex. Punctation of entire tergites very dense, all punctures droplet-shaped. Surface without microsculpture; setation similar to that on elytra.
Male. Protarsomeres 1-3 conspicuously dilated and sub-bilobed, each covered with modified pale setae ventrally, protarsomere 4 narrower than preceding ones, heart-shaped. Aedeagus (Figs 10-12) narrow and elongate, median lobe narrowed into long narrow apical portion



Figs 10-16: *Hesperus mylomys* sp.n.: 10 – aedeagus, ventral view; 11 – aedeagus, lateral view; 12 – apex of paramere with sensory peg setae; 13 – apical portion of male ventrite 8; 14 – male ventrite 9; 15 – female tergite 10; 16 – gonocoxite of female genital segment.
Obr. 10-16: *Hesperus mylomys* sp. n.: 10 – aedeagus, ventrální strana; 11 – aedeagus, laterální strana; 12 – apikální část spodní strany paramery se smyslovými sensilami; 13 – apikální část 8 ventritu; 14 – 9 ventrit samce; 15 – 10 tergit samice; 16 – gonocoxit, zadečkový segment samice.

with obtuse apex, paramere small, much shorter than median lobe, strongly narrowed into acute apex, underside of paramere with sensory peg setae. Sternite VIII (Fig. 13), sternite IX (Fig. 14), aedeagus (Figs 10-12).

Female. Protarsomeres 1-3 less dilated than those of male, each covered with modified pale setae ventrally, protarsomere 4 small. Tergite X (Fig. 15), genital segment with gonocoxites (Fig. 16).

Differential diagnosis. *Hesperus mylomys* sp. n. may be distinguished from the most similar species, *H. gestroi* Bernhauer, 1915, by a darker colouring of the elytra, denser punctation of the scutellum, unicolored abdomen and different shape of the aedeagus.

Distribution. Republic of South Africa.

Name derivation. The name of this species, a noun in apposition, is the Latin generic name of the African groove-toothed rat *Mylomys dybowskii* (Pousarques, 1893).

ACKNOWLEDGEMENTS. My sincere thanks are due to Marc de Meyer (Musee Royal de L'Afrique centrale, Tervuren, Belqium) and Manfred Uhlig (Museum der Alexander Humboldt Universität, Berlin, Germany) for the loan of the African material for identification, to Josef Jelínek (National Museum of Prague, Czech Republic), Jan

Růžička (Czech University of Life Sciences Prague, Praha, Czech Republic) and Harald Schillhammer (Naturhistorisches Museum, Wien, Austria) for their help in preparing the manuscript and to Antonín Volek (Čtyřkoly, Czech Republic) for a careful finish of the line drawings.

REFERENCES

BERNHAUER M. 1915: Neue Staphyliniden des tropischen Afrika. *Verhandlungen der k. k. Zoologisch-botanischen Gesellschaft in Wien*, 65: 287-321.

BERNHAUER M. 1928: Zur Staphylinidenfauna des tropischen Afrika, inbesonders des Kongostaates. *Wiener Entomologische Zeitung*, 45(4): 105-121.

HERMAN L. H. 2001: Catalog of the Staphylinidae (Insecta: Coleoptera), 1758 to the end of the second millenium. V. Staphylinine group (Part 2): Diochini, Maorothiini, Othiini, Platyprosopini, Staphylinini. *Bulletin of the American Museum of Natural History*, 265: 2674-2694.

SCHEERPELTZ O. 1956: Die von Prof. Dr. K. E. Schedl in Belgisch-Kongo aufgefundenen Staphyliniden. *Revue de Zoologie et de Botanique Africaines*, 55: 8-46.

SCHEERPELTZ O. 1971: Studien an den Arten der Gattung Hesperus Fauvel (Col., Staphylinidae). *Entomologische Arbeiten aus dem Museum G. Frey*, 22: 150-197.

SMETANA A. 1995: Rove Beetles of the subtribe Philonthina of America north of Mexico (Coleoptera: Staphylinidae): classification, phylogeny and taxonomic revision. *Memories on Entomology*, *International*, 3: 1-946.

SOUHRN

V práci jsou popsány dva nové druhy rodu *Hesperus* Fauvel, 1874 z Afrotropické oblasti, *Hesperus anas* sp. n. z Demokratické Republiky Kongo a *Hesperus mylomys* sp. n. z Jihoafrické Republiky. Tento rod je zastoupen v afrotropické oblasti 25 druhy (Herman 2001). *H. anas* je velmi podobný druhu *H. addisadebaensis* Scheerpeltz, 1971 z Ethiopie a Keni (viz obr. 7-9), od kterého se liší hustším tečkováním hlavy, štítu a krovek, menšíma očima, zlatavě lesklým, zřetelně dozadu zúženým štítem (u *H. addisadebaensis* je štít zúžený dopředu), hustším a hrubším tečkovaním zadečku a jiným tvarem aedeagu. *H. mylomys* je nejvíce podobný *H. gestroi* Bernhauer, 1915 z Rovníkové Guiney (Bernhauer 1915), od kterého se liší tmavším zbarvením krovek, hustším tečkováním štítku, jednobarevným zadečkem a jiným tvarem aedeagu. Hlavní pohlavní znaky obou obou nových druhů a *H. addisadebaensis* jsou vyobrazeny.