New species and new records of the genus *Doliops* Waterhouse, 1841 (Coleoptera: Cerambycidae)

Arvīds Barševskis

Barševskis A. 2014. New species and new records of the genus *Doliops* Waterhouse, 1841 (Coleoptera: Cerambycidae). *Baltic J. Coleopterol.*, 14 (1): 113 – 135.

Eight new species of the genus *Doliops* Waterhouse, 1841 (Coleoptera: Cerambycidae) are described and illustrated: *D. ageometrica* sp. n., *D. balalaikinsi* sp. n., *D. daugavpilsi* sp. n., *D. huruki* sp. n., *D. kivlenieceae* sp. n., *D. jirouxi* sp. n., *D. serapavginae* sp. n., *D. tamutisi* sp. n. New faunistic data for 23 species are given. Two new taxonomic changes are proposed: *Doliops confluens* Kriesche, 1928 stat. nov. (from *D. siargaoensis confluens* Kriesche, 1928), *D. geometrica* Waterhouse, 1841 = *D. geometrica conjuncta* Kriesche, 1928 syn. nov. An updated check-list of the genus *Doliops* Waterh. is proposed. The genus *Doliops* is now represented by 54 species.

Key words: Coleoptera, Cerambycidae, Doliops, fauna, new species, taxonomy, Philippines

Arvīds Barševskis. Daugavpils University, Institute of Life Sciences and Technologies, Coleopterological Re search Center, Vienības Str. 13, Daugavpils, LV-5401, Latvia; e-mail: arvids.barsevskis@du.lv

INTRODUCTION

The genus *Doliops* Waterhouse, 1841 belongs to the tribe Apomecyni (Coleoptera: Cerambycidae: Lamiinae). Species of this genus are distributed in the Philippines archipelago and the nearby Lanyu and Lu Tao island, belonging to the Taiwan archipelago. The mimicry between species of the genus *Doliops* and members of the genera *Pachyrrhynchus, Metapocyrtus* etc. (Curculionidae: Pachyrrhynchini) is remarkable (Vives 2005, Cabigas 2010). The genus *Doliops* is now represented in the world fauna by 54 species

The genus *Doliops* has recently been thoroughly studied and almost every year there are new spe-

cies described. Thirteen new species have been described by Vives (2005, 2009a, 2009b, 2011, 2012a, 2012b, 2013) and eight species of the genus were described by author (Barševskis 2013). Barševskis & Jaeger (2014) published an article about types of *Doliops*, which are deposited in the Senckenberg Natural History Collections in Dresden, where they are described two species from the genus *Doliops* and related genus *Lamprobityle* Heller, 1923.

The aim of this study is to improve knowledge of the genus *Doliops* Waterh. of the world's fauna. The previous study is based on the material of Daugavpils University beetle collection (DUBC), where the large collection of this genus is deposited. In this paper eight new species are

descibed, as well as provided new data on distribution of 23 species.

High-resolution habitus images of *Doliops* species, including type specimens and additional material, are available at Cerambycidae of the World web-project http://www.cerambycidae.org (Barševskis 2014).

MATERIALS AND METHODS

This research is based on the study of specimens of the genus *Doliops* which are deposited in Daugavpils University beetle collection. In totally, 365 specimens from 41 species are revised. All types of new species are deposited in the collection of the Daugavpils University, Coleopterological Research Center (Ilgas, Daugavpils Distr., Latvia) - DUBC. All specimens have been collected in the Philippines by local collectors.

The laboratory research and measurements have been made by *Nikon* AZ100, *Nikon* SMZ745T and *Zeiss* Stereo Lumar V12 digital stereomicroscopes, NIS-Elements 6D software, and *Canon* 60D and *Canon* 1 Ds Mark II cameras. In the faunistic list, the name of the species is followed by the label data. The number of studied specimens is indicated in parentheses.

RESULTS

Description of new species

Doliops ageometrica sp. n. (Fig. 1A, B,C)

Type material. Holotype: Female. Philippines: Mindanao, Mt. Apo, Kidapawan, South Cotabato, 09.2014, local collector leg.

Paratypes: Male and female. Philippines: Mindanao, Mt. Apo, Kidapawan, South Cotabato, 09.2014, 2 specim., local collector leg.

Description. Body black, with a strong golden, purple or greenish metallic luster. Elytra with

transverse bands of greenish scales. Body length: 12.8 mm, largest width: 5.2 mm.

Head almost square, parallel-sided, with bilobate eyes. Part of head between eyes and antennal bases with impressed longitudinal band of greenish scales and thin, straight median line. Apically of greenish band some of scales white. Cheeks under eyes with spot of greenish scales and sparse puncturation. Labrum pubescent and punctate. Head metallic golden-coloured, finely punctate, with fine microsculpture, glossy, with luster; convex frontally, with very fine microsculpture, punctuation and tomentum. Two basal an-tenn with strong metallic luster and pubescence, third antennomere broun basally, black and widened apically, fourth antennomere testaceous basally, with very fine pubescence, remaining segments testaceous and tomentose. Pronotum very convex, metallic shiny, with microsculpture and with sparse punctuation laterally, pronotal disc with long X-shaped stripes of greenish scales, which circle shaped connected laterally. Disc of pronotum with pubescence, shiny. Scutellum rounded, shiny and tomentose. Elytra convex, shiny, with strong metallic luster and transverse stripes of greenish scales. First line to weld wide curved and go backwards on side of elytra. Next two lines transverse, almost parallel. Apical stripe triangular. Lateral side of elytra with a few protruding shoulder bumps. Elytra behind shoulders on both sides with wide raised nodules and wide impressions. Width of elytra at shoulders: 4.6 mm. Largest width of elytra behind middle: 5.2mm. Elytra with microsculpture. Anteriorly and laterally with sparse and coarse punctures and pubescence. Meso-, metaepimera and sternites spotted laterally, covered by greenish scales. Femora very shiny, with strong metallic luster and with small elongate greenish spot at apex, more or less tomentose. Dorsal surface of tarsomeres covered by grey, iridescent tomentum. Tibia and tarsi in apical part covered by numerous setae.

Differential diagnosis. The new species is similar to *D. geometrica* Waterhouse, 1842 by general

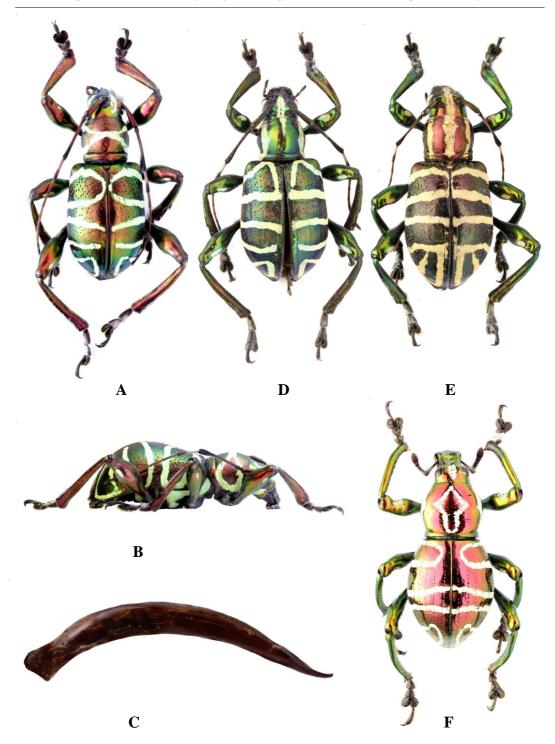


Fig. 1. A - D. ageometrica sp. n. (dorsal view), B - D. ageometrica sp. n. (lateral view), C - D. ageometrica sp. n. (aedeagus), D - D. geometrica (dorsal view), E - D. multifasciata (dorsal view), F - Pachyrrhynchus cf. speciosus (Curculionidae) (dorsal view).

shape of body, but differs from this species by shape of pronotum on which is long X-shaped stripes of greenish scales, which are circle shaped and connected laterally, and shape of first line of elytra, which is near suture broadly rounded and connected with second stripe, no triangular as by *D. geometrica* (Fig. 1 A, B, D). The new species is a litle similar also to *D. multifasciata* (Fig. 1E) by pattern of surface.

Mimicry. *D. ageometrica* sp. n. mimics the weevil *Pachyrrhynchus cf. speciosus* (Curculionidae) (Fig. 1 E).

Etymology. The species name *ageometrica* is derived from latin name "*geometrica*" and prefix "a", which means – "no *geometrica*". This species name alludes to the similarity with *D. geometrica*.

Doliops balalaikinsi sp. n. (Fig. 2A, B)

Type material. Holotype: Male. Philippines: Luzon, Sierra Madre, Quirino, 2014, local collector leg.

Paratypes: Male and 5 females: Philippines: Luzon, Sierra Madre, Quirino, 08.2011, local collector leg., 10.2013, 2 specim., local collector leg. 11.2013, local collector leg., 04.2014, local collector; Isabela, 09.2013, local collector leg.

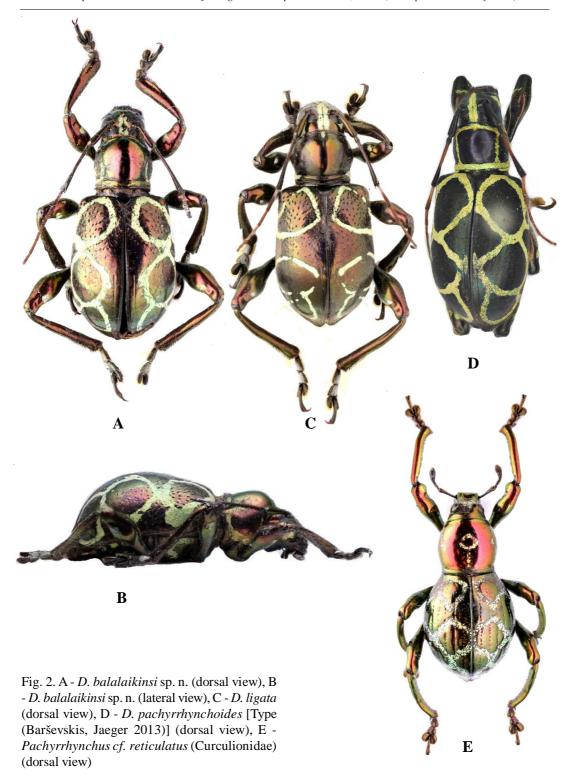
Description. Body black, with strong metallic luster. Surface of elytra with three big, greenish, iridescent circle-shaped spots. Body length: 11.9 – 14.2 mm, largest width: 4.8 – 6.0 mm.

Head almost square, parallel-sided, with bilobate eyes. Head between eyes and antennal bases with longitudinal band of greenish scales and thin, straight median line without scales. Longitudinal band long, pointed frontally. On front of greenish band head covered by very fine pubescence and punctuation. Cheeks beneath eyes with large transverse spot of greenish scales

or without it, with some punctures near eyes and with fine transverse microsculpture. Labrum pubescent and punctate. Head finely punctate, glossy, with strong metallic luster; weakly convex frontally, with very fine punctuation. First antennomere glossy, with metallic luster, second antennomere black and with light luster, third antennomere dark broun basally, black and widened apically, remaining antennomeres are testaceous and tomentose. Pronotum convex, shiny, with sparse coarse punctuation laterally and with very fine microsculpture. Dorsal disc of pronotum in middle of frontal part with short rudimental spot of greenish scales, with large semicircle-shaped spot of greenish scales laterally. Disc of pronotum in centrum without pubescence, shiny, with very fine punctuation. Scutellum rounded apically, shiny and tomentose. Elytra convex, shiny, with strong metallic luster and with three circle-shaped spots of greenish or yellow scales. Circles sometimes confluent, with wider bands than that at D. pachyrrhynchoides Heller, 1916. Elytra finely punctate; on sides with lightly protrunding shoulder bumps. Elytra behind shoulders on both sides with wide raised nodules and impressions; with sparse and coarse punctures and pubescence anteriorly and laterally. Width of elytra at shoulders: 4.5 – 5.4 mm. Largest width of elytra behind middle: 4.8 – 6.0 mm. Meso-, metaepimera and sternites spotted laterally, covered with greenish scales. Femora with small greenish or yellow spot at apex and more or less tomentose. Dorsal surface of tarsomeres covered by grey, tomentum. Tibia and tarsi in apical part covered by numerous setae.

Differential diagnosis. The new species is similar to *D. pachyrrhynchoides* and *D. ligata* Schwarzer, 1929. All tree these species are with tree big circle shaped spots on elytra. Shape of these spots are specific for every species. Different also shape of pronotum and colour of body (Fig. 2A, B, C, D).

Mimicry. *D. balalaikinsi* sp. n. mimics the weevil *Pachyrrhynchus cf. reticulatus* (Coleoptera: Curculionidae) (Fig. 2E).



Etymology. This species is named after my colleague, Latvian coleopterologist Maksims Balalaikins (Daugavpils University, Daugavpils, Latvia) in appreciation of cooperation.

Doliops daugavpilsi **sp. n.** (Fig. 3A, B, C)

Type material. Holotype: Male. Philippines: Mindanao, Mt. Apo, Davao del Sur, 12.2013, local collector leg.

Paratype: Female. Philippines: Mindanao, Mt. Apo, Davao del Sur, 04.2014, local collector leg.

Description. Body black, with a thin (holotype) or very strong golden (paratype) luster. Surface with yellow, iridescent circle-shaped spots. Body length: 12.7 - 13.0 mm, largest width: 5.5 - 5.7 mm.

Head almost square, parallel-sided, with bilobate eyes. Head between eyes and antennal bases with longitudinal band of yellow scales and thin, straight median line without scales. Longitudinal band long, in frontal part start with small white scales, in basal part interrupted (holotype) or continuously wide (paratype). On front of yellow band head covered by white pubescence. Cheeks beneath eyes with large spot of yellow scales, with some punctures near eyes and with fine transverse microsculpture. Labrum pubescent and punctate. Head black, finely punctate, glossy, with light or strong golden luster. In frontal part weakly convex, with punctuation. Two basal antennomeres black with light luster (holotype) or first antennomere with strong golden luster and second antennomere black (paratype). First two basal antennomeres with pubescence, third antennomere brown basally, fourth antennomere testaceous basally, with very fine white pubescence; remaining antennomeres testaceous and tomentose. Pronotum convex, black, shiny, with sparse coarse punctuation and with fine transverse microsculpture. Dorsal disc of pronotum in frontal part with short fine longitudinal stripe of yellow scales, lateral parts

with large circle-shaped spot of yellow scales. Disc of pronotum in centrum of basal part without pubescence, shiny. Scutellum rounded apically, shiny and tomentose. Elytra convex, black, shiny, without metallic luster (holotype) or with strong golden luster (paratype), with yellow circleshaped spots of scales. Basal yellow circle elongated, similar as that of D. villalobosi Heller, 1926 (Fig. 3D). Second spot transverse, lightly 8 - shaped, in dorsal and lateral parts connected with basal spot. Third apical spot lightly triangular, connected with previous transversal spot laterally. Elytra on side with slightly protruding shoulder bumps. Elytra finely punctate; behind shoulders on both sides without raised nodules and impressions; with sparse and coarse punctures and pubescence anteriorly and laterally. Width of elytra at shoulders: 5.1 mm. The largest width of elytra is behind the middle: 5.7 mm. Meso-, metaepimera and sternites spotted laterally, covered by yellow scales. Femora with small yellow spot at apex and more or less tomentose. Dorsal surface of tarsomeres covered by grey, tomentum. Tibia and tarsi in apical part covered by numerous setae.

Aedeagus (Fig. 3C).

Differential diagnosis. The new species differs from other species of the genus *Doliops* Waterh. by shape of surface.

Mimicry. *D. daugavpilsi* sp. n. mimics the weevil *Pachyrrhynchus sp.* (Coleoptera: Curculionidae) (Fig. 3E).

Etymology. The name *daugavpilsi* dedicated to the second largest city of Latvia – Daugavpils (www.daugavpils.lv), where located Daugavpils University (www.du.lv), one of the most important Coleopterological research center of Eastern Europe.

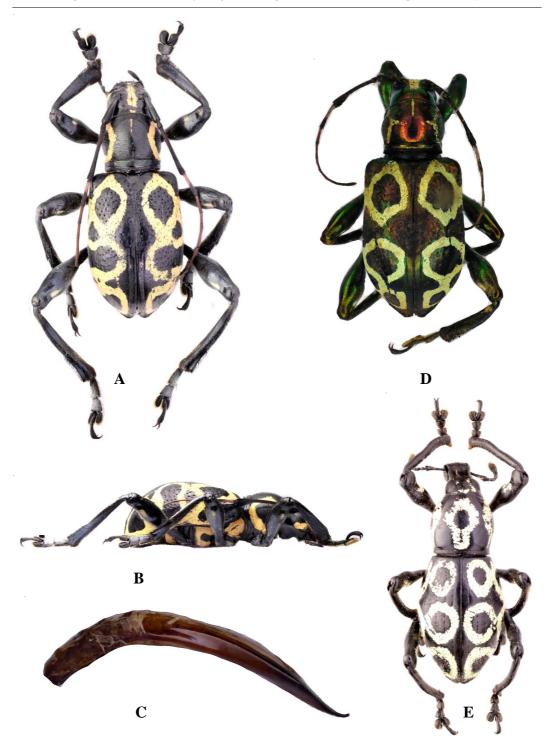


Fig. 3. A - *D. daugavpilsi* sp. n. (dorsal view), B - *D. daugavpilsi* sp. n. (lateral view), C - *D. daugavpilsi* sp. n. (*aedeagus*), D - *D. villalobosi* [Typr (Barševskis, Jaeger 2014)] (dorsal view), E - *Pachyrrhynchus sp.* (Curculionidae) (dorsal view)

Doliops huruki sp. n. (Fig. 4A, B, C)

Type material. Holotype: Male. Philippines: Mindanao, Mt. Apo, Davao del Sur, 12.2013, local collector leg.

Description. Body black, with luster. Elytra monochrome black, without spots. Body length: 15.0 mm, largest width: 5.7 mm.

Head almost square, parallel-sided, with bilobate eyes. Part of head between eyes and antennal bases with longitudinal band of greenish scales and thin, straight median line without scales. On front of greenish band some of scales white. Cheeks beneath eyes without spots of greenish scales, with punctuation. Labrum pubescent and punctate. Head black, finely punctate, glossy, with luster. In frontal part convex, with very fine microsculpture. Three basal antennomeres black with metallic luster and pubescence, fourth antennomere testaceous basally, with very fine white pubescence, and remaining antennomeres testaceous and tomentose. Basal antennomeres and legs with greenish metallic luster. Pronotum convex, black, shiny, with sparse punctuation, without stripes or spots of greenish scales. Disc of pronotum in centrum without pubescence, shiny, in lateral parts with fine transverse microsculpture and sparse punctuation. Scutellum rounded, shiny and tomentose. Elytra convex, black, shiny, without metallic luster and spots of scales. Lateral siedes of each elytron with slightly protruding shoulder bumps; with sparse and coarse punctures and pubescence anteriorly and laterally. Elytra finely punctate; behind shoulders on both sides without raised nodules and impressions. Width of elytra at shoulders: 5.0 mm. Largest width of elytra behind middle: 5.7 mm. Meso-, metaepimera and sternites spotted laterally, covered by greenish scales. Femora with small greenish spot at apex and more or less tomentose. Dorsal surface of tarsomeres covered by grey, iridescent tomentum. Tibia and tarsi in apical part covered by numerous setae.

Aedeagus (Fig. 4C).

Differential diagnosis. The new species differs from other species of the genus *Doliops* by monochrome black elytra.

Mimicry. *D. nigra* sp. n. mimics the weevil *Pachyrrhynchus sp.* and *Metapocyrtus sp.* (Coleoptera: Curculionidae) (Fig. 4D).

Etymology. This species is named after my colleague and friend, the Polish carabidologist Stanislaw Huruk (Jan Kochanowski University, Kielce, Poland) in appreci-ation of cooperation.

Doliops kivlenieceae sp. n. (Fig. 5A, B)

Type material. Holotype: Female. Philippines: Mindanao, Bukidnon, San Fernando, 03.2014, local collector leg.

Description. Body black, very shiny, with bright coppery luster. Surface with pale, greenish scales, arranged in longitudinal lines. Body length: 14.2 mm, largest width: 7.1 mm.

Head glossy, with golden luster and longitudinal band of pale, iridescent scales between eyes and protruded antennal bases. Cheeks with well deweloped transverse spot of pale greenish scales. Labrum glossy, with golden-greenish luster, covered by light pubescence and row of dark setae. Head finely punctate and sometimes with fine microsculpture and pubescence. First three antennomere lustrous and tomentose. First antennomere golden-coloured, with bright metallic luster. Second antennomere very short, with light metallic luster. Third antennomere long, with widened apex and inner brush of dark setae. Remaining antennomeres cylindrical, reddish. Prono-tum convex, black, very shiny, with wide semicircular band of pale laterally, greenish iridescent scales and with large spots of longitudinal and transverse bands dorsally. Disc of pronotum shiny, with well distinct microsculpture and sparse punctures. Scutellum rounded and tomentose in apical part. Elytra very convex,

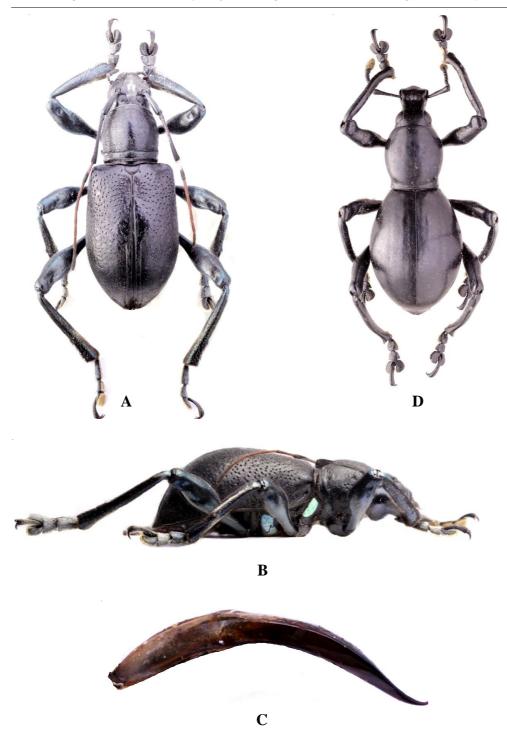


Fig. 4. A - D. huruki sp. n. (dorsal view), B - D. huruki sp. n. (lateral view), C - D. huruki sp. n. (aedeagus), D - Pachyrrhynchus sp. (dorsal view).

black, shiny, on each side with longitudinal rows of pale greenish, iridescent scales. Elytra with wide transverse row of greenish scales basally and with longitudinal rows of coarse punctures; background of elytra finely punc-tate. Width of elytra at shoulders: 5.0 mm. Greatest width of elytra behind middle: 5.2 mm. Meso, meta-epimera and sternites with lateral spots, covered by pale greenish scales. Legs of holotype black, with metallic green luster, shiny. Femora witht small apical spot of greenish scales, more or less tomentose. Surface of tarsomeres black, with dark pubescence. Tibia and tarsus covered by numerous setae apically.

Diferential diagnosis. This new species is closely related with *D. valainisi* Barševskis, 2013, and *Doliops costatus* Vives, 2012, but differs from compared species by the characteristic pattern of the body surface. Disc of pronotum by new species with large spots of longitudinal and transverse bands, but basis of elytra with wide transverse band of pale scales, different as by *D. valainisi* (Fig. 5C) and *D. costatus*. Body of *D. kivlenieceae* sp. n. broader and more convex as by both other species.

Mimicry. *D. kivlenieceae* sp. nov. as well as *D. valainisi* Barš. mimics the weevil *Pachyrrhynchus sp. & Matapocyrtus sp.* (Coleoptera: Curculionidae) (Fig. 5D, E).

Etymology. This species is named after my colleague, Latvian coleopterologist Dr. Inese Kivleniece (Daugavpils University, Daugavpils, Latvia) in appreciation of cooperation.

Doliops jirouxi **sp. n.** (Fig. 6A, B, C, D, E)

Type material. Holotype: Male. Philippines: Luzon, Sierra Madre, Quirino, 08.2013, local collector leg.

Paratypes: 5 males & 3 females, Philippines: Luzon, Sierra Madre, Quirino, 07.2013, 1

specimen, local collector leg., 08.2013, 4 specimens, local collector leg., 09.2013, 1 specimen, local collector leg.; Nueva Vyscaya, Belance, 08.2013, 1 specimen, local collector leg., Nueva Viscaya, Dupax del Sur, 09.2013, 1 specimen, local collector leg.

Description. Body black, with a light or some specimens with a strong coppery luster. Surface with five circle-shaped spots of green, iridescent scales. Bodylength: 12.0-14.5 mm, largest width: 5.7-7.0 mm.

Head almost square, parallel-sided, with bilobate eyes. Head between eyes and antennal bases with longitudinal band of greenish scales and thin, straight median line without scales. Longitudinal band long, in frontal part cuspidated, continues to pronotum in basally. Head on front of greenish band covered by pubescence, glossy. Labrum pubescent. Cheeks beneath eyes with transverse band-shaped spot of greenish scales, with fine punctures near eyes. Two basal antennomeres black with green lustre and pubescence, third antennomere brown basally, fourth antennomere testaceous basally, with very fine white pubescence, remaining antennomeres testaceous and tomentose, apical antennomre lightly darkened. Pronotum convex, black, shiny, with coppery luster and very fine punctuation. Dorsal disc of pronotum in frontal part with short spot of greenish scales, lateral parts with large circle-shaped spot of greenish scales, slightly interrupted at top. Lateral disc of pronotum in centrum without pubescence, shiny. Scutellum rounded apically, shiny and tomentose, black or with strong metallic luster. Elytra convex, black, shiny, with light or strong metallic luster, each elytron with five greenish circle-shaped spots of scales, three of which located at dorsal part and two at lateral. Both pairs of dorsal and lateral spots oft are confluent, 8 - shaped. Elytra finely punctate; behind shoulders on both sides without raised nodules, with light impressions under circle-shaped spots; with sparse and coarse punctures and pubescence anteriorly and laterally. Meso-, metaepimera and sternites spotted laterally, covered with greenish scales.

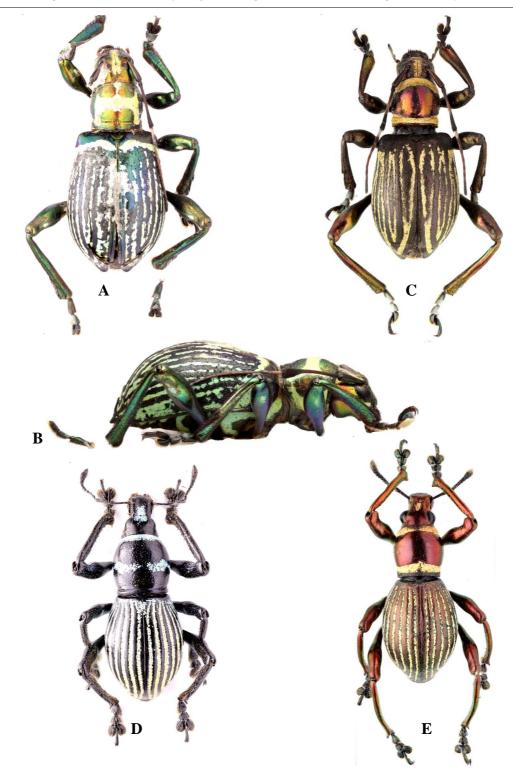


Fig. 5. A - D. kivlenieceae sp. n. (dorsal view), B - D. kivlenieceae sp. n. (lateral view), C - D. valainisi (dorsal view), D - Metapocyrtus sp. (dorsal view), F - Pachyrrhynchus sp. (dorsal view)

Femora with green spot at apex and more or less tomentose. Dorsal surface of tarsomeres covered by grey tomentum. Tibia and tarsi in apical part covered by numerous setae.

Aedeagus (Fig. 6E).

Differential diagnosis. The new species a little similar to *Doliops shavrini* Barševskis, 2013 (Fig. 6F, G) by body surface shape, but differs from it by complex of characters. Pronotum of *D. shavrini* Barš. with stripe of pink or greenish scales along lateral pronotal margin and rounded spot at basal margin and each elytron with five pale, pink or greenish spots from which only apical spot circleshaped, while pronotum of *D. jiroux*i sp.n. in frontal part with short spot of greenish scales, lateral parts with large circle-shaped spot of greenish scales which in the top are slightly interrupted and each elytron with five green circleshaped spots.

Mimicry. *D. jirouxi* sp. n. mimics the weevil *Pachyrrhynchus sp.* (Coleoptera: Curculionidae) (Fig. 6H).

Etymology. This species is named after my colleague prominent French cerambycidologist Eric Jiroux in appreci-ation of cooperation.

Doliops serapavginae sp. n. (Fig. 7 A, B, C)

Type material. Holotype: Female. Mindanao, Mt. Parker, T'boli, South Cotabato, 07.2014, local collector leg.

Paratypes: Male. Philippines: Mindanao, Mt. Apo, Kidapawan, South Cotabato, 09.2014, local collector leg.; Female. Philippines: Mindanao, Kiamba, Sarangani, 09.2014, local collector leg.

Description. Body black, with light luster. Surface very convex, with greenish, iridescent spots. Body length: 13.1–13.8 mm, largest width: 5.5–6.1 mm.

Head almost square, parallel-sided, with bilobate eyes. Head between eyes and protrudet antennal bases with longitudinal band of greenish scales and thin straight median line. Head on front of greenish band shiny, without white pubescence. Cheeks beneath eyes without spot of greenish scales, without sparse punctures near eyes and with very fine transverse microsculpture. Labrum pubescent and punctate. Head black, finely punctate, glossy, with luster. In frontal part weaklyconvex, with very fine transverse microsculpture. Two basal antennomeres black with light purple luster and pubescence, third antennomere brown basally, fourth antennomere testaceous basally, with very fine white pubescence, remaining antennomeres testaceous and tomentose. Pronotum very convex, shiny, with sparse coarse punctuation in lateral parts, with fine transverse microsculpture. Pronotum in frontal part with transverse stripe of greenish scales, widened laterally. Disc of pronotum in centrum without pubescence, shiny. Scutellum apically rounded, shiny and tomentose. Elytra very convex, black, shiny, with purple or greenish metallic luster, with greenish spots of scales. Basal yellow circle small, round, not elongated. Second spot transverse, narrow. Apical spot slightly triangular, often interrupted basally, with enlarged corners. Lateral sides of elytra with slightly protruding shoulder bumps. Lateral sides of each elytron behind shoulders without raised nodules and with wide impressions under transverse band. Width of elytra at shoulders: 4.7 – 5.0 mm. Largest width of elytron behind middle: 5.5 - 6.1 mm. Elytra with sparse and coarse punctures and pubescence laterally, in the front of transverse band smoothly. Meso-, metaepimera and sternites spotted laterally, covered with greenish scales. Femora without small yellow spot at apex, more or less tomentose. Dorsal surface of tarsomeres covered by grey, tomentum. Tibia and tarsi in apical part covered by numerous setae.

Aedeagus (Fig. 7C).

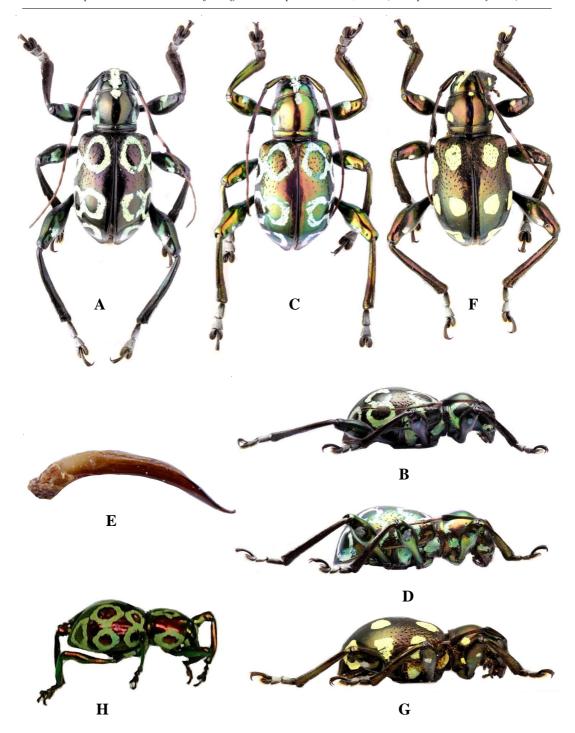


Fig. 6. A - *D. jirouxi* sp. n. (Form 1, dorsal view), B - *D. jirouxi* sp. n. (Form 1, lateral view), C - *D. jirouxi* sp. n. (Form 2, dorsal view), D - *D. jirouxi* sp. n. (Form 2, lateral view), E - *D. jirouxi* sp. n. (*aedeagus*), F - *D. shavrini* (dorsal view), G - *D. shavrini* (lateral view), H - *Pachyrrhynchus sp.* (lateral view)

Differential diagnosis. The new species similar to D. frosti Schultze, 1923 (Fig. 7D), D. confluens Kriesche, 1928 (Fig. 7E), D. viridisignata Breuning, 1947 (Fig. 7F) and D. siargaoensis Schultze, 1919 (Fig. 9A, C) by some features of body surface shape, but differs from these species by shape of spots on elytra and pronotum. First transverse band by D. serapavginae sp. n. is more narrower as by D. huruki sp. n. and D. frosti. Apical spot by by D. serapavginae sp. n. is different as by all other species: slightly triangular, often interrupted basally, with enlarged corners. By D. huruki sp. n. apical spot is triangular, completely covered with scales, by D. siargaoensis, D. siargaoensis, D. frosti and D. confluens apical spot content from three different spots - one triangular and two rounded or one V - shaped and one transverse stripes. New species differs from other species also with shape of pronotum and some other features.

Remark. The holotype of this species was infected by Nematoda. Withdrawn of Nematoda are glued on paper and added to the holotype specimen.

Etymology. This species is named after my colleague and friend, the Turkish coleopterologist Sakine Serap Avgin (Kahramanmaraş Sütçü İmam Üniversitesi, Kahramanmaraş, Turkey) in appreci-ation of cooperation.

Doliops tamutisi **sp. n.** (Fig. 8A, B, C)

Type material. Holotype: Male. Philippines: Mindanao, Bukidnon, Intavas, 04.2014, local collector leg.

Paratypes: 2 Females. Philippines: Mindanao, Bukidnon, Cabanglasan, 06.2014, local collector leg.

Description. Body black, with light luster. Elytra covered by pale iridescent scales, except for

narrow transverse band along basis of elytra and before middle, and after it with longitudional band along suture. Body length: 12.8 - 13.0 mm, largest width: 5.2 - 5.6 mm.

Head almost square, parallel-sided, with bilobate eyes. Part of head between eyes and protrudet antennal bases with longitudinal band of pale, iridescent scales and thin, straight median line without scales. Cheeks beneath eyes with wide transverse spot of pale scales and with sparse very fine punctuation. Labrum pubescent and punctate, with golden or greenish luster. Head black, glossy, with golden luster; convex in the frontal part, with very fine microsculpture and with fine tomentum. Two basal an-tennomeres black with metallic luster and pubescence, third antennomere testaceous basally, black apically and with widened apex, fourth antennomere testaceous, with very fine white pubescence, remaining antennomeres testaceous and tomentose. Pronotum convex, very shiny, with delicate, transverse microsculpture and sparse punctuation, with large spots of longitudinal and transverse bands dorsally. Scutellum rounded, shiny and tomentose. Elytra finely punctate, convex, black, shiny, with greenish metallic luster and covered with pale, iridescent scales, except for narrow transverse band along basis of elytra and before middle, and after it with longitudional band along suture. Each elytron with slightly protruding shoulder bumps on the sideand behind shoulders on both sides with very weakly raised nodules and small wide impressions. Width of elytra at level of shoulders: 4.4 - 4.6 mm. Largest width of elytra is behind the middle: 5.2 - 5.6 mm. Meso-, metaepimera and sternites spotted laterally, covered by pale scales. Femora black, with greenish metallic luster and with small pale spot at apex, more or less tomentose. Dorsal surface of tarsomeres covered by grey, iridescent tomentum. Tibia and tarsi covered by numerous setae in apical part.

Aedeagus (Fig. 8C).

Differential diagnosis. The new species by body surface features similar with *Doliops edithae*

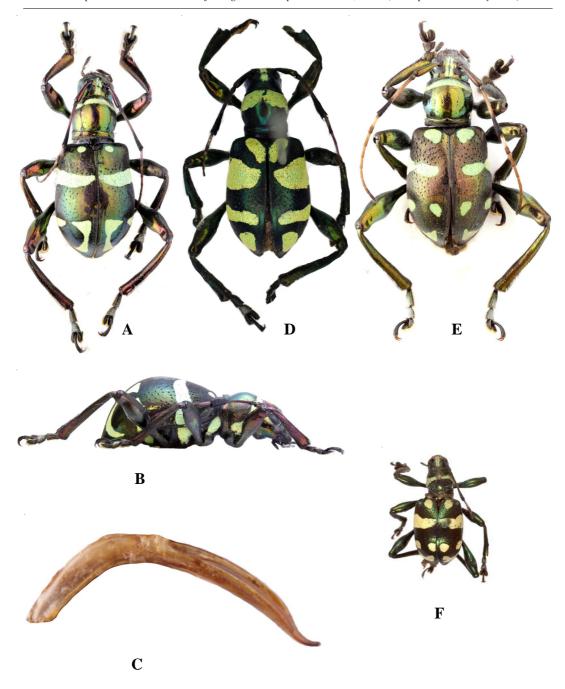


Fig. 7. A - *D. serapavginae* sp. n. (dorsal view), B - *D. serapavginae* sp. n. (lateral view), C - *D. serapavginae* sp. n. (*aedeagus*), D - *D. frosti* [Type (Barševskis, Jaeger 2014)] (dorsal view), E - *D. confluens* (dorsal view), F - *D. viridisignata* [Type (from: www.naturarv.se)] (dorsal view)

Vives, 2009 (Fig. 10E) and *D. cuellari* Vives, 2012 (Fig. 8D, E). Pronotum of *D. tamutisi* sp. n. with large spots of longitudinal and transverse bands dorsally, but pronotum of *D. edithae* and *D. cuellari* different: emarginated *D. edithae* and spotted with rounded spots *D. cuellari*.

Etymology. This species is named after my colleague and friend, Lithuanian coleopterologist Vytautas Tamutis (Kaunas, Lithuania) in appreciation of cooperation.

Taxonomic changes

Kriesche (1928) described D. siargaoensis confluens Kriesche, 1928 from Bucas Isl. This subspecies is significantly differs from the nominative form by the shape of elytra (Fig. 9A, B). The nominative form *D. siargaoensis* Schultze, 1919 is described from Siargao Isl. (Schultze, 1919) (Fig. 9C, D). After the study of types of D. siargaoensis Schultze, 1919 which are deposited in the Senckenberg Natural History Collections in Dresden (Germany), and D. siargaoensis confluens Kriesche, 1928, which are deposited in the Museum für Naturkunde in Berlin (Germany), I propose to change the taxonomic status of this subspecies rising it to the rank of species *Doliops* confluens Kriesche, 1928 stat. nov. In the collection of DUBC Doliops confluens Kriesche is presented by one male specimen from Mindanao Isl., Bukidnon, Kalatungan environ, which was collected by a local collector in April, 2014.

At the same paper, Kriesche (1928) described *D. geometrica conjuncta* Kriesche, 1928 (Fig. 9E, F) from Bucas Isl. After the study of the types of *D. geometrica* Waterhouse, 1841 (Fig. 9G, H), which are deposited in Natural History Museum (London, UK) and *D. geometrica conjuncta* Kriesche, which are deposited in Museum für Naturkunde in Berlin (Germany), I suggest *D. geometrica conjuncta* Kriesche, 1928 **syn. nov.** as a junior synonym of *D. geometrica* Waterh.

Faunistic records

- Doliops anichtchenkoi Barševskis, 2013 – Philippines: Luzon, Cagayan, 11.2013 (2 specim.), Cagayan, Sta. Ana, 03.2014 (1 specim.), 05.2014 (2 specim.).
- 2. **Doliops bukidnoni Vives, 2013** Philippines: Mindanao, Agusan del Sur, 02.2014. (1 specim.), Agusan del Sur, Esperanza, 03.2014 (1 specim.); Bukidnon, Cabanglasan, 03.2014. (1 specim.), Bukidnon, San Fernando, 02.2014. (1 specim.).
- 3. *Doliops cuellari* Vives, 2012 Philippines: Mindanao, Mt. Apo, Davao del Sur, 12.2013 (2 specim.), 02.2014. (1 specim.), Libertad, 03.2014 (1 specim.).
- 4. *Doliops duodecimpunctata* Heller, 1923

 Mindoro, Mt. Halcon, 08.2013 (1 specim.), 03.2014 (1 specim.), 04.2014 (1 specim.), Puerto Galera, 06.2014 (1 specim.), 08.2014 (1 specim.).
- 5. *Doliops dupaxi* Vives, 2013 Philippines: Lu-zon, Nueva Viscaya, Belance, 08.2013 (4 specimens), Dupax del Sur, 12.2013. (1 specimen).
- 6. **Doliops edithae Vives, 2009** (Fig. 10E) Philippines: Min-danao, Bukidnon, Bulacao, 03.2014 (1 specimen).
- 7. *Doliops elcanoi* Vives, 2011 Philippines: Lu-zon, Nueva Viscaya, Belance, 08.2013 (2 specim.), 09.2013 (1 specim.), 12.2013 (1 specimen), Kayapa, Mapayao, 05.2014 (1 specim.).
- 8. *Doliops emmanueli* Vives, 2009 Philippines: Luzon, Nueva Viscaya, Belance, 08.2013 (8 specim.), 05.2014 (3 specim.), Kasibu, 04.2014 (1 specim.), 09.2014, (1 specim.), Nueva Viscaya, 04.2014 (1 specim.); Pangasinan, Malico, 05.2014 (1 specim.).

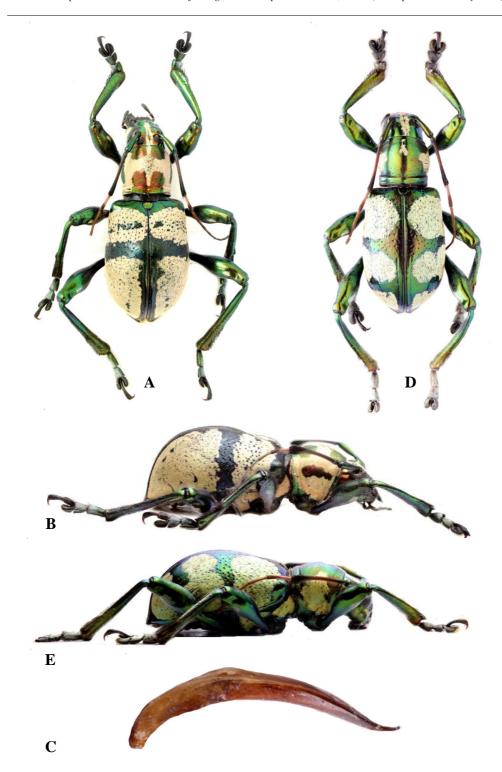


Fig. 8. A - *D. tamutisi* sp. n. (dorsal view), B - *D. tamutisi* sp. n. (lateral view), C - *D. tamutisi* sp. n. (*aedeagus*), D - *D. cuellari* (dorsal view), E - *D. cuellari* (lateral view)

- 9. **Doliops geometrica** Waterhouse, 1842

 Philippines: Mindanao, Surigao del Sur, San Miguel, 06.2014 (1 specim.); Samar, Hinabangan, 08.2014 (1 specim.), 09.2014, (1 specim.).
- 10. **Doliops gertrudis Huedepohl, 1990** (Fig. 10A) Philippines: Negros, Mt. Canla-on, 900 1700 m a.s.l., 19.09.2014 (2 specim.).
- 11. **Doliops halconensis Vives, 2012** Philippines: Mindoro, Mt. Halcon, 10.2013 (1 specim.), 12.2013 (1 specimen).
- 12. **Doliops helleri Vives, 2009** Philippines: Luzon, Sierra Madre, Quirino, 08.2013 (1 specim.), 10.2013 (1 specimen).
- Doliops isabelae Vives, 2013(Fig. 10B)

 Philippines: Luzon, Isabela, San Pablo,
 08.2014 (1 specim.), 09.2014 (1 specim.),
 Kalinga, Balbalan, 05.2014 (1 specim.),
 Kalinga, Pinukpok, 08.2014 (1 specim.).
- 14. **Doliops ligata** Schwarzer, 1929 (Fig. 11E) Philippines: Luzon, Sierra Madre, Isabela, 08.2014 (3 specim.), Isabela, Dindin, 08.2014 (2 specim.).
- 15. *Doliops metallica* Breuning, 1938 (Fig. 10F)— Philippines: Luzon, Nueva Viscaya, Balance, 08.2013 (1 specim.), 09.2013 (1 specim.), 03.2014, (1 specim.), 04.2014 (1 specim.), 05.2014(3 specim.), Kasibu, 09.2014, (1 specim.); Kayapa, Mapayao, 05.2014 (1 specim.), Nueva Viscaya, 04.2014 (1 specim.); Ifugao, Pola, 08.2014 (1 specim.).
- 16. *Doliops multifasciata* Schultze, 1922 Philip-pines: Mindanao, Bukidnon, 12.2013 (1 specim.), Bukidnon, Cabanglasan, 03.2014, (1 specim.), 08.2014 (1 specim.), Bukidnon, Intavar, 02.2014. (1 specim.), Bukidnon, San Fernando, 02.2014. (1 specim.), Bukidnon, Zamboanga, 03.2014 (1 specim.).
- 17. *Doliops octomaculata* **Breuning, 1938** (Fig. 10C, H) Phil-ippines: Luzon, Cagayan,

- 12.2013 (1 specim.), Cagayan, Sta Ana, 03.2014 (1 specim.), 08.2014. (1 specim.).
- Doliops pachyrrhynchoides Heller, 1916
 Philippines: Luzon, Nueva Viscaya, Aurora, 08.2013 (2 specim.).
- 19. **Doliops savenkovi Barševskis, 2013** Philippines: Luzon, Sierra Madre, Quirino, 06.2012 (1 specim.).
- 20. *Doliops shavrini* Barševskis, 2013 Philippines: Luzon, Nueva Viscaya, Antao, 08.2013 (1 specim.), 05.2014 (1 specim.), Sierra Madre, Quirino, 07.2013. (6 specim.), 08.2013 (2 specimen), 03.2014 (1 specim.), 05.2014 (2 specim.).
- 21. *Doliops similis* Miwa & Mitono, 1933 (Fig. 10D) Taiwan: Lanyu, Lanyu Taitung Co., 02.05.2012 (2 specim.), Kuntai Wang leg.).
- 22. *Doliops taylori* Vives, 2013 Philippines: Luzon, Nueva Viscaya, Aritao, 08.2013 (1 specim.), 05.2014 (10 specim.), Nueva Viscaya, 04.2014 (1 specim.); Ifugao, Pola, 08.2014 (1 specim.).
- 23. *Doliops villalobosi* Heller, 1926 Mindanao, Bukidnon, 12.2013. (2 specim.), 01.2014. (1 specim.), Bukidnon, Cabanglasan 01.2014. (1 specim.), 03.2014 (3 specim.), 08.2014 (1 specim.), Bukidnon, San Fernando, 02.2014. (2 specim.), 03.2014. (2 specim.).

The Check-List of the genus *Doliops* Waterhause, 1841

- 1. *Doliops ageometrica* Baršeevskis, **sp. n.** Philippines: Mindanao
- 2. *Doliops anichtchenkoi* Barševskis, 2013 Philippines: Luzon, Mindoro
- 3. *Doliops animula* Kriesche, 1940 Philippines: Luzon

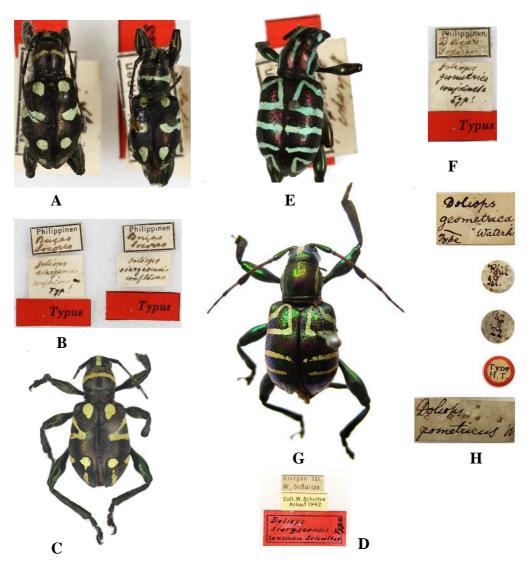


Fig. 9. A. - *D. siargaoensis confluens* [Types (Photo Joachim Willers)], B - *D. siargaoensis confluens* [Labels (Photo Joachim Willers)], C - *D. siargaoensis* [Type (from: Barševskis, Jaeger 2014)], D - *D. siargaoensis* [Labels], E - *D. geometrica conjuncta* [Type], F - *D. geometrica conjuncta* Kriesche, 1928 [Labels], G - *D. geometrica* [Type (from: www.flickr.com/photos/nhm_beetle_id/)] (dorsal view), H - *D. geometrica* [Type (from: www.flickr.com/photos/nhm_beetle_id/)] (labels)

- 4. *Doliops bakeri* Heller, 1924 Philippines: Negros
- 5. *Doliops balalaikini* Barševskis, **sp. n.** Philippines: Luzon
- 6. *Doliops basilana* Heller, 1923 Philippines: Basilan
- 7. *Doliops bitriangularis* Breuning, 1947 Philippines: Luzon

- 8. *Doliops bukidnoni* Vives, 2013 Philippines: Mindanao
- 9. *Doliops confluens* Kriesche, 1928 **stat. n.** Philippines: Bucas, Mindanao
- 10. *Doliops costatus* Vives, 2012 Philippines: Mindanao
- 11. *Doliops cuellari* Vives, 2012 Philippines: Mindanao
- 12. *Doliops curculionoides* Waterhouse, 1841 Philippines: Luzon, Masbate, Mindanao, Samar
- 13. *Doliops daugavpilsi* Barševskis, **sp. n.** Philippines: Mindanao
- 14. *Doliops duodecimpunctata* Heller, 1923 Philippines: Lu-zon, Mindanao, Mindoro
- 15. *Doliops dupaxi* Vives, 2013 Philippines: Luzon
- 16. *Doliops edithae* Vives, 2009 Philippines: Mindanao
- 17. *Doliops elcanoi* Vives, 2011 Philippines: Luzon
- 18. *Doliops emmanueli* Vives, 2009 Philippines: Luzon
- 19. *Doliops frosti* Schultze, 1923 Philippines: Samar
- 20. *Doliops geometrica* Waterhouse, 1842 Philippines: Lu-zon, Mindanao, Samar = *D. geometrica conjuncta* Kriesche, 1928 **syn. n.**
- 21. *Doliops gertrudis* Hudepohl, 1990 Philippines: Negros
- 22. *Doliops gutowskii* Barševskis, 2013 Philippines: Mindanao
- 23. *Doliops halconensis* Vives, 2012 Philippines: Mindoro

- 24. *Doliops helleri* Vives, 2009 Philippines: Luzon
- 25. *Doliops huruki* Barševskis, **sp. n.** Philippines: Mindanao 26. *Doliops imitator* Schultze, 1918 Philippines: Luzon
- 27. *Doliops isabelae* Vives, 2013 Philippines: Luzon
- 28. *Doliops ismaeli* Vives, 2005 Philippines: Babuyan
- 29. *Doliops jirouxi* Barševskis, **sp. n**. Philippines: Luzon
- 30. *Doliops johnvictori* Vives, 2009 Philippines: Luzon
- 31. *Doliops kivlenieceae* Barševskis, **sp. n**. Philippines: Mindanao
- 32. *Doliops ligata* Schwarzer, 1929 Philippines: Luzon
- 33. *Doliops magnifica* (Heller, 1923) Philippines: Luzon
- 34. *Doliops metallica* Breuning, 1938 Philippines: Luzon
- 35. *Doliops multifasciata* Schultze, 1922 Philippines: Min-danao
- 36. *Doliops octomaculata* Breuning, 1938 Philippines: Luzon
- 37. *Doliops pachyrrhynchoides* Heller, 1916 Philippines: Luzon
- 38. *Doliops pinedai* Vives, 2012 Philippines: Luzon
- 39. *Doliops savenkovi* Barševskis, 2013 Philippines: Luzon
- 40. *Doliops schultzei* Barševskis, Jaeger, 2014 Philippines: Polillo

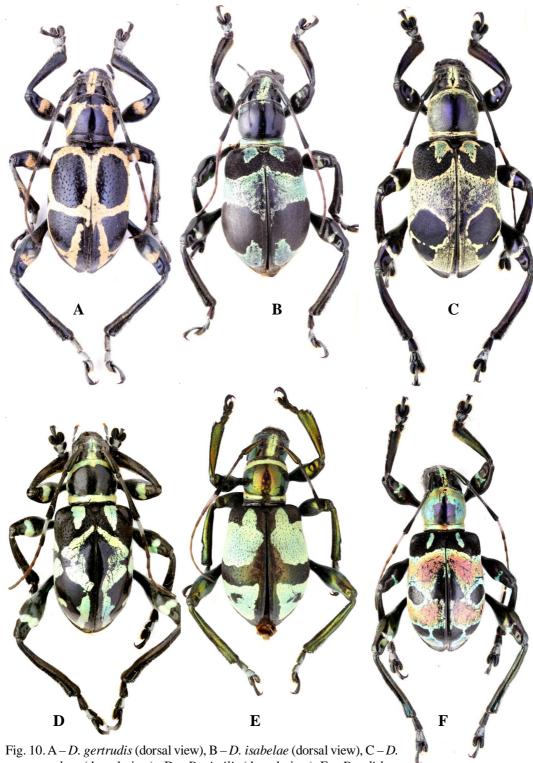


Fig. 10. A – D. gertrudis (dorsal view), B – D. isabelae (dorsal view), C – D. octomaculata (dorsal view), D – D. similis (dorsal view), E – D. edithae (dorsal view), F – D. metallica (dorsal view)

- 41. *Doliops serapavginae* Barševskis, **sp. n.** Philippines: Mindanao
- 42. *Doliops shavrini* Barševskis, 2013 Philippines: Luzon
- 43. *Doliops siargaoensis* Schultze, 1919 Philippines: Siargao
- 44. *Doliops similis* Miwa & Mitono, 1933 Philippines: Taiwan
- 45. *Doliops sklodowskii* Barševskis, 2013 Philippines: Luzon
- 46. *Doliops stradinsi* Barševskis, 2013 Philippines: Luzon
- 47. *Doliops tamutisi* Barševskis, **sp. n.** Philippines: Mindanao
- 48. *Doliops taylori* Vives, 2013 Philippines: Luzon
- 49. *Doliops transverselineata* Breuning, 1947 Philippines: Calayan
- 50. *Doliops urdanetai* Vives, 2011 Philippines: Philippines: Luzon
- 51. *Doliops valainisi* Barševskis, 2013 Philippines: Mindanao
- 52. *Doliops villalobosi* Heller, 1926 Philippines: Mindanao, Samar
- 53. *Doliops viridisignata* Breuning, 1947 Philippines: Luzon
- 54. *Doliops vivesi* Barševskis, 2013 Philippines: Luzon

AKNOWLEDGEMENTS

I wish to exdpress my gratitude to my colleagues Dr. Alexander Anichtchenko and Dr. Alexey Shavrin (Daugavpils, Latvia) for valuable comments and suggestions on the manusript of this article I thank my colleague Dr. Alexander Anichtchenko for help in preparation of all the photographs of the beetles, Marina Janovska for the laboratory assitence and mounting of specimens, which are used in the present study. I wish to thank Dr. Eva Sprecher-Uebersax Naturhistorisches Museum Basel (Swiss), Dr. Johannes Bergsten, Förste Intendent Entomology Collection, Swedish Museum of Natural History (Sweden), Dr. Max Barclay and Dr. Roger G. Booth, Department of Life Sciences, The Natural History Museum (U.K.), Damir Kovac and Andrea Hastenpflug-Vesmanis, Entomologie I, Senckenberg Gesellschaft für Naturforschung (Germany), Manfred Uhlig and Joachim Willers (Museum fur Naturkunde (Germany) for provided photos of type specimens of the genus Doliops.

This research was supported by ESF Project (Agreement No. 2013/0029/1DP/1.1.1.2.0/13/APIA/VIAA/029).

REFERENCES

- Barševskis A. 2013. Contribution to the knowledge of the genus *Doliops* Waterhouse, 1841 (Coleoptera: Cerambycidae). *Baltic J. Coleopterol.*, 13 (2): 73 89.
- Barševskis A. 2014. Genus *Doliops* Waterhouse, 1841. In: Barševskis A. et al., (editors): Cerambycidae of the World. Available from: http://cerambycidae.org/taxa/Doliops-Waterhouse-1841 (Accessed on 03.11.2014)
- Cabigas E. 2010. A Folio of genus *Pachyrrhynchus* Germar model and its mimics. Salagubang, 1-51.
- Kriesche R. 1928. Neuen Lamiinae-Rassen (Col. Ceramb.). Deutsch. Entomol. Zeitschr., 45 48.
- Schultze W. 1919. Seventh contribution to the Coleoptera fauna of the Philippines, 15: 545 561.

Vives E. 2005. New or interesting Cerambycidae from the Philippines (Part I) (Coleoptera, Cerambycidae). Les Cahiers Magellanes, 49: 1 – 13 Received: 20.10.2014. Accepted: 02.12.2014.

- Vives E. 2009a. New or interesting Cerambycidae from the Philippines (Part II) (Coleoptera, Cerambycidae). Les Cahiers Magellanes, 88: 1 -25
- Vives E. 2009b. New or interesting Cerambycidae from the Philippines (Part III) (Coleoptera, Cerambycidae). Les Cahiers Magellanes, 105: 1–20.
- Vives E. 2011. New or interesting Cerambycidae from the Philippines (Part IV) (Coleoptera, Cerambycidae). Les Cahiers Magellanes, NS, 3: 9–19.
- Vives E. 2012a. New or interesting Cerambycidae from the Philippines (Part V) (Coleoptera, Cerambycidae). Les Cahiers Magellanes, NS, 7: 70 82.
- Vives E. 2012b. New or interesting Cerambycidae from the Philippines (Part VI) (Coleoptera, Cerambycidae). Les Cahiers Magellanes, NS, 9: 34 46.
- Vives E. 2013. New or interesting Cerambycidae from the Philippines (Part VII) (Coleoptera, Cerambycidae). Les Cahiers Magellanes, NS, 11: 62–75.



www.cerambycidae.org