

New faunistic and taxonomic data of the genus *Pachyteria* Audinet-Serville, 1883 (Coleoptera: Cermabycidae: Callichromatini)

Anastasija Vasiljeva, Aleksander Anichtchenko, Arvīds Barševskis

Vasiljeva A., Anichtchenko A., Barševskis A. 2021. New faunistic and taxonomic data of the genus *Pachyteria* Audinet-Serville, 1883 (Coleoptera: Cermabycidae: Callichromatini). *Baltic J. Coleopterol.*, 21(2): 161 - 167.

Faunistic data for 22 species of genus *Pachyteria* Audinet-Serville, 1883, deposited in Daugavpils University Beetle Collection (DUBC) is provided. The studied specimens are originated from six countries of the Oriental Region: Laos, China, Indonesia, Thailand, Malaysia and Vietnam are given. The taxonomic status of *P. diversipes bouvieri* Ritsema, 1896, stat. rest. known from Laos and Thailand is discussed.

Key words: Coleoptera, Cerambycidae, *Pachyteria*, fauna, taxonomy, new status, redescription

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

INTRODUCTION

The genus *Pachyteria* was described by Audinet-Serville (1883) within the tribe Callichromatini, for species with very long maxillary palps and a galea, at least as long as the mandible, provided with a spatulated and pilose palpi. Mandibles long and ciliated in its internal side (Abang & Vives, 2004). The genus was revised recently by Morati & Huet (2004) and according this study 30 species are currently known.

The present article is based on the study of the material (232 specimens) stored in the collection of DUBC. As a result, new faunistic data for 22 species of the genus is provided and one subspecies is redescribed. The variability of *P. diversipes* Ritsema, 1890 is discussed and illustrated.

MATERIAL AND METHODS

All specimens determined by authors and deposited in Daugavpils University Beetles Collections (DUBC – Ilgas, Daugavpils Distr., Latvia).

Specimens were studied using Nikon SMZ 745T and Nikon Eclipse E200 stereomicroscopes. The illustrations were made using digital camera Canon EOS 6D with Canon MP-E 65mm macrolens, using StackShot system and Helicon Focus auto montage, subsequently was edited using Photoshop. The descriptive terminology follows the work of Niisato (2001). All label data are quoted as they appear on the labels attached to the specimens; comments by the authors are given between square brackets.

RESULTS

1. *Pachyteria basalis* Waterhouse, 1878

Material examined: Malaysia: Trusmadi, Sabah, 04.2013 (1 male).

Indonesia: West Kalimantan, Bawang Mt., 04.2017 (1 male).

2. *Pachyteria chewi* Morati & Huet, 2004

Material examined: Indonesia: West Kalimantan, Bawang Mt., 04.2015 (1 male, 1 female); *idem* but 05.2015 (1 male, 1 female); *idem* but 09.2017 (2 males, 2 females); *idem* but 08.2017 (1 female); *idem* but 10.2017 (1 female); *idem* but (1 male), *idem* but 05.2019 (1 male).

3. *Pachyteria dimidiata* Westwood, 1848

Material examined: Malaysia: Cameron Highlands, 04.2012 (1 male); Perak, Tapah Hills, 05.2009 (1 female).

China: Guangxi, Debao Co, Huanglianshan Mt., 06.2011 (1 male).

Laos: Vientian Reg., Vang Vieng env., 19.09.2017, Vishnyakov A. leg., (1 male);

Indonesia: West Sumatra, Padang, 04.2014 (1 male); Padang, Lembah, Annai, 01.2004 (1 male); East Java, Argopuro Mt., 05.2015 (1 male); *idem* but 06.2017 (1 female).

Thailand: Lamphun, 10.10.1994 (1 male); *idem* but 06.2006 (2 males); Chiang Rai, 06.1991 (1 male, 1 female); Chiang Mai, 06.2011 (1 female); *idem* but 13.06.1999 (1 male 1 female), Phu Phan Mt., 2060m, 05.2018 (1 female);

Vietnam: Tam Dao, 80km NW Hanoi, 21°34'N 105°20'E, h=1000m, summer 1996, Viktor Siniavsky leg., (1 female); Lam Dong, Maria past., 05.2017 (1 female); Lam Dong, Bao Loc, 06.2017 (3 males 1 female); Lam Dong, Bao Lam, Da Ton, 06.2016 (1 male 1 female); Dong Tien, Binh Thuan, 06.2018 (1 female); Lam Dong, Bao Lam, Dambri, 05.2017 (1 male 1 female); *idem* but 07.2017 (1 female); *idem* but 09.2017 (1 female); Yen Bai, 06.2020 (1 female); West Sumatra, Padang 04.2014 (1 male).

4.1. *Pachyteria diversipes diversipes* Ritsema, 1890

(Figs. 3, 6, 9)

Remarks. The detailed redescription of *P. diversipes* were given by Morati & Huet (2004).

Material examined: Vietnam: Bao Loc, Lam Dong, Dambri 05.2017 (4 males, 1 female); *idem* but 05.2019 (2 males); *idem* but 06.2017 (4 males, 1 female); *idem* but 04.2019 (4 males, 1 female); *idem* but 05.2016 (1 female); *idem* but 07.2017 (1 male, 1 female); Dong Tien, Binh Thuan, 05.2019 (1 female).

Morpha: Vietnam, Axan, Tay Giang-Quang Nam, 1300m, 07.2019 (1 female).

4.2. *Pachyteria diversipes bouvieri* Ritsema, 1896 stat. rest.

(Fig 1, 4, 7)

Material examined: Laos: Kvang Si Falls, 550m 06.2018 (1 male), Luang Prabang, 360m, 05.2019 (1 female).

Thailand: Phu Phan Mt. 2060m 06.2018 (4 males).

Remarks. *P. bouvieri* were described by Ritsema (1896: 330) in base of single female from "Lakhon: Siam (Harmand)" [Thailand] (MNHN). Later species was synonymized with *P. diversipes* by Morati & Huet (2004), in base of studying of Holotype and five additional specimens, in which only one possibly belongs to a real *P. bouvieri*.

Comparative notes.

The subspecies *P. d. bouvieri* can be easily distinguished from nominate subspecies by have purple black head (i.e. red in *P. d. diversipes*) and by entirely red legs. Besides differences in the coloration, these subspecies can be distinguished by other morphological features, i.e. basal antennomere punctured more denser and coarser than that in *P. d. diversipes*; pronotum less transverse; border of anterior margin of pronotum strongly and highly raised; median pronotal furrow more distinct; scutellum of *P. diversipes bouvieri* is shorter (Figs 4, 6).

P. diversipes (Figs 1, 3) is close to *P. semiplicata* (Fig 2) from Vietnam, but differs by the following features: antennomeres 7-11 black in *P. diversipes bouvieri*, apical half of 6 and 7-11 antennomeres are black in *P. diversipes diversipes*, while in *P. semiplicata* apical half of 9 and 10-11 antennomeres are black; disc of pronotum of *P. diversipes* moderately punctate, punctures rounded and not confluent, while that in *P. semiplicata* densely punctate, punctures confluent transversally (Figs 7-8); elytra of *P. diversipes* with purplish-blue shiny apical part i.e., black in *P. semiplicata*; *P. diversipes* apical portions of each elytron with shiny and sparsely punctate elevated area along suture, i.e., in *P. semiplicata* apical half of elytra uniformly minutely punctate; *P. diversipes* metatibia and first segment of metatarsus red, i.e. *P. semiplicata* apical part of metatibia and all metatarsomeres black.

Redescription. Body length: 29.8-32.0 mm. Width: 8.6-9.5 mm. Body medium to relatively large-sized, with moderately long elytra.

Head black, with purplish-blue shiny subapical segments of palpi, labrum and anterior margin of clypeus dark-brown, moderately convex. Eyes large, strongly convex. Frons flattened in middle, strongly depressed in fronto-clypeal and at lateral portions; frons with large and smooth, subtriangular area; with dense and slightly coarse, fine lateral punctuation; median longitudinal groove thin and deep.

Antennae stout, reaching apical fifth (male) or fourth (female) length of elytra; antennomeres 1-2 and basal three quarters of 3th are reddish; apical part of 3th and 4-7 antennomeres yellow pale, sometimes apical part of 7th antennomere slightly darker (one specimen with apical tree quarters black); 8-11 black.

Pronotum blood red, except of black with purplish-blue gloss apical and basal margins; pronotum slightly transverse, moderately convex, with stout lateral tubercles in middle. Disc of pronotum with irregular punctuation, sparser in

middle, with fine longitudinal line in medioapical half; interstices about 0.5-3 times as wide as diameter of nearest puncture. Scutellum black, elongated and triangular, weakly convex, with transverse concavity in apical third (Fig 3).

Elytra bicolored, basal half blood red and apical half black, with dark blue shiny; surface of elytra with fine punctuation, densely covered by setae; elytra moderately wide and elongate, strongly narrowed just before roundly truncate apices; median part of each elytron glabrous, arcuately sinuate; disc of elytra moderately convex, depressed near base along apical half of suture, depressed part covered by setae denser than that in other elytron parts.

Legs dark red, long, densely covered by setae; basal segment of metatarsa reddish brown, more than 1.2 times as long as following two segments combined; tarsomeres of fore legs and middle legs – dark brown; spurs as long as apical width of metatibia; tibiae with dense pubescence along outer sides and near apices; apical part of metatibia slightly curved; femora thin, narrowed basally, gradually widened apically, apical part narrowed, metafemora bends less pronounced; metafemora markedly longer than meso- and profemora.

Abdomen black, light-blue glossy, strongly narrowed apicad; shape of apical abdominal segments shows difference between male and female: apical margin has an lobate indentation in males, and orbicularily shaped in females.

Male. Aedeagus with deep and narrow incision on widely triangular apex (Figs 10-11).

Female. Similar to male, but body slightly broader and longer, and antennae shorter.

Distribution. This subspecies is known from Luang Prabang, Laos and Mt. Phu Phan, Thailand.

5. *Pachyteria equestris* Newman, 1841

Material examined: Indonesia: Quest Sumatra, Talang Mt., 02.2017 (1 male, 1 female); Sumatra, Brastagi env., 27.03.2016 (1 male, 1 female); Sumatra, Berastagi Distr., Sibayak Mt, 25.03.2016 (1 male); West Sumatra, Singgalang, Annai Valley, 600m, Lapai vill., 05.2006 (1 male); West Sumatra, Mt. Sanggul, 1250 m alt., 30km N of Payakumbuh, 07.2018, St. Jakl leg. (2 males) Malaysia: Cameron Highlands, 10.2014 (2 males); Perak, Tapah Hills, 03.2018 (1 male); *idem* but 2018 (1 male).

6. *Pachyteria javana* Bates, 1879

Material examined: Indonesia: West Java, 08.2018 (4 males, 1 female); *idem* but 11.2019 (4 males, 1 female); Java, Kencana Mt., 07.2016 (1 male); *idem* but 06.2016 (1 male); West Java, Gede Mt., 05.2010 (1 male); East Java Prov., Mt. Argopuro, Bermi Vill env., 1200-1400 m alt, July 2017 (1 male).
Morpha: Indonesia: East Java, Agropuro Mt., 05.2017 (3 males); *idem* but 09.2015 (3 males, 1 female); *idem* but 06.2017 (2 males); *idem* but 01.1999 (1 male); East Java, 12.2015 (1 male, 1 female); *idem* but 01.2014 (3 males); *idem* but 10.2011 (1 male); Java, 03.2014 (1 male); *idem* but 04.2010 (1 male).

7. *Pachyteria jeanninae* Bentanachs & Drouin, 2015

Material examined: Indonesia: West Kalimantan prov., Bawang Prov., 05.2019 (1 male).

8. *Pachyteria kurosawai* Niisato, 2001

Material examined: Indonesia: Central Sulawesi, Palolo, Kamarora vill., 12.2017 (3 males, 2 females); Mamasa, Celebes, 03.2015 (2 males); South Sulawesi, Panngia Maros, 05.2014 (2 males); Central Sulawesi, Palolo, Palu, Kamarora vill., 10.2017 (1 male, 1 female); South-East Sulawesi, 08.2017

(1 female); South Sulawesi, 07.2002 (1 male); South Sulawesi, 05.2014 (1 male); Central Sulawesi, Palolo, Kamarora vill., 05.2018 (1 female); Palu-Palolo, W Sumatra, Annai Valley, 400m, 04.2002 (1 male).

9. *Pachyteria lambii* Pascoe, 1866

Material examined: Malaysia: Perak, Tapah Hills, 04.2017 (1 male); *idem* but 04.2014 (1 male, 1 female); *idem* but 05.2016 (1 male); *idem* but 06.2018 (1 male); Tapah, 04.2008 (1 male); Cameron Highlands 04.2012 (1 male); Pahang, Cameron Highlands, Tanah Rata distr., 1500m, 05.2011 (1 male); *idem* but 1300m, 05.2011 (1 male).

10. *Pachyteria loebli* Morati & Huet, 2004

Material examined: Indonesia: Sumatra, Lampung, 01.2008, V.A. Voitsehovsky leg., (1 female); West Sumatra, Narau Valley, h=600-800m, ca 25km N of Payakumbuh, 05.2018 (1 female); West Sumatra, Singgalang Mountain, 1000m, 06.2005 (1 male); Sumatra, Annai Valley, S slopes of Singgalang Mt. h=600-1000m, 06.2007(2 male); *idem* but 500-1000m, 06.2007 (1 female); *idem* but 400-600m, 05.2006 (1 male).

11. *Pachyteria melancholica* Ritsema, 1909

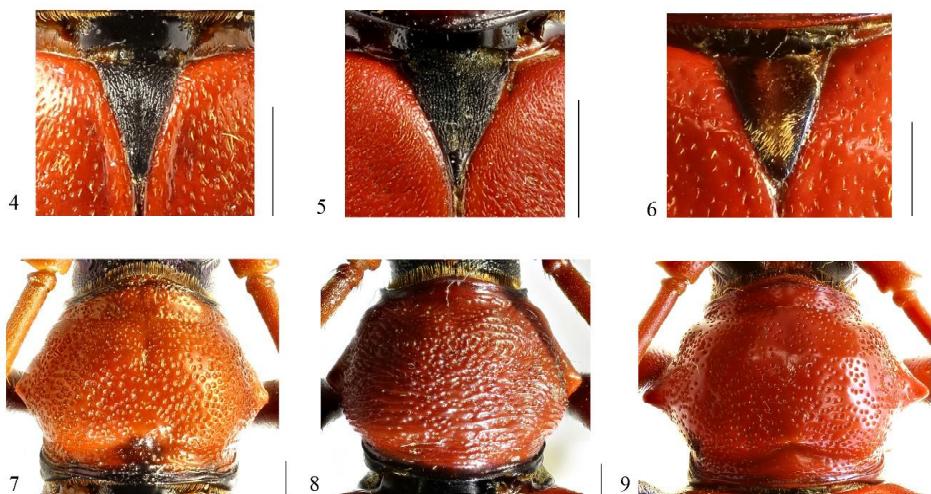
Material examined: Indonesia: Sumatra, Padang, Lembah Annai, 01.2017 (1 male); *idem* but 01.2015 (1 male); *idem* but 01.2014 (1 male, 1 female); Sumatra, Sibolangit, 02.07.2014 (2 males); West Sumatra, Mt. Talang, 1000-1500 m, 3-4.2005 (1 male).

12. *Pachyteria nigra* Morati & Huet, 2004

Material examined: Indonesia: Quest Sumatra, Padang, Lembah Annai, 2017 (1 male); Lembah Annai, Padang, Sumatra, 01.2015 (1 male); Sumatra, Mt. Singgalang, 06.2014 (1 male); Sumatra, Annai Valley, Lapai Vill., 600m., 06.2014 (1 male; 2 females); *idem* but 05.2013 (1 female).



Figs 1-2. Habitus of *Pachyteria* species: 1 – *P. diversipes bouvieri* Ritsema, 1896 stat. rest., male; 2 – *P. semiplicata* Pic, 1927, female; 3 – *P. diversipes diversipes* Ritsema, 1890. Scale bar = 1.0 cm.



Figs 4-9. Scutellum: 4 – *P. diversipes bouvieri* Ritsema, 1896 stat. rest.; 5 – *P. semiplicata* Pic, 1927; 6 – *P. diversipes diversipes* Ritsema, 1890. Pronotum of *Pachyteria* species: 7 – *P. diversipes bouvieri* Ritsema, 1896 stat. rest.; 8 – *P. semiplicata* Pic, 1927; 9 - *P. diversipes diversipes* Ritsema, 1890. Scale bar = 1.0 mm.

13. *Pachyteria nocki* Bentanachs & Drouin, 2015

Material examined: Indonesia: West Kalimantan, Mt.Bawang, 09.2017 (2 males); *idem* but 11.2017 (1male).

14. *Pachyteria pryeri* Ritsema, 1888

Material examined: Indonesia: West Kalimantan, Bawang Mt., 04.2015 (3 males); *idem* but 04.2017 (1 female); *idem* but 05.2019 (1 female); *idem* but 04.2019 (1 female); *idem* but 05.2015 (2 males, 1fe-



Figs 10-11. Aedeagus of *Pachyteria diversipes bouvieri* Ritsema, 1896: 10 – dorsal view; 11 – lateral view. Scale bar = 1.0 mm.

male); *idem* but 09.2017 (1 male), *idem* but 06.2016 (2 females).

15. *Pachyteria ruficollis* Waterhouse, 1878

Material examined: Malaysia: North Borneo, Sabah, Crocker Range Mt., 03.2012 (1 male); *idem* but 2013 (1 male); *idem* but 04.2014 (1 male); *idem* but 04.2014 (1 female); *idem* but 08.04.2010 (1 male); North Borneo, Trus Madi Mt., 12-18.04.2015 (2 males); *idem* but 04.2012 (1 female); *idem* but 1200m, 12-18.04.2015 (1 male); North Borneo, Sabah, Keningau distr., Trus Madi Mt., 1160m, 06.2012, J.Chew leg., (1 male).

16. *Pachyteria rugosicollis* Ritsema, 1881

Material examined: Indonesia, Quest Java, Mt. Kencana, vi.2016 (1 male), “Indonesia, Sukabumi vill., West Java, vii.2019 (1 female).

17. *Pachyteria semiplicata* Pic, 1927 (Figs 2, 5, 8)

Material examined: Vietnam: Tam Thai Mt., Tuong Duong Dis Nghe An Prov., h=400m, 03.2019 (1 male).

18. *Pachyteria similis* Ritsema, 1890

Material examined: Vietnam: Lam Dong, Bao Lam, Dambri, 07.2017 (3 males); *idem* but 05.2017 (1 female).

19. *Pachyteria speciosa* Pascoe, 1866

Material examined: Malaysia: Perak, Tapah Hills, 03.2014 (2 males, 1 female); Perak, Tapah Hills, 03.2018 (2 females); Pahang, Cameron Highlands, Tanah Rata distr., 06.2016 (1 female); Pahang, Cameron Highlands, 10.2014 (1 female); Cameron Highlands, 04.2012 (1 male).

20. *Pachyteria sumatrana* Hüdepohl, 1998

Material examined: Indonesia: West Sumatra, Padang, 02.2013 (1 male); West Sumatra, Mt. Sanggul, 1250-1400 m alt. cca 25 km N of Payakumbuh, Landai vill. Env., 12.2014 (1 male); West Sumatra, Sako Tapan (Painan Reg.), 100 m alt, 02.2007, St. Jakl leg (1 male); West Sumatra, Annai Valley, 500-1000 m SE slopes of Mt. Singgalang, 06.2007 (1 male).

21. *Pachyteria sumbaensis* Hayashi, 1994

Material examined: Indonesia: Lombok, Rinjajni Mt., 02.2014 (4 males); *idem* but 11.2012 (1 male); Lombok Isl., 01.2016 (1 female); Timor, 12.2019 (1 male); Timor, Mt. Motis, 12.2012 (1 male); Jawa, Kencana, 06.2016 (1 male); Lesser Sundas, Lombok Is., S Slopes of Mt. Rinjani, 11.2016 (1 male).

22. *Pachyteria virescens* Pascoe, 1866

Material examined: Malaysia: Perak, Tapah Hills, 03.2017 (1 male); *idem* but 03.2018 (1 male, 2 females); *idem* but 07.2011 (1 male, 1 female); *idem* but 06.2018 (3 females); *idem* but 07.2016 (2 males); *idem* but 06.2010 (1 female); Cameron Highlands, Tanah Rata dist., h=1500 m, 04.2009 (1 male); Cameron Highlands, 05.2012 (1 male); *idem* but 10.2020 (3 males).

REFERENCES

Received: 15.09.2021

Accepted: 21.12.2021

Published: 30.12.2021

Abang F., Vives E. (2004) Two new species of Callichromatini from Sarawak, South-Western Borneo (Coleoptera: Cerambycidae), *Lambillionea* 104 (2): 233-238.

Morati J., Huet M. (2004) Révision du genre *Pachyteria*, Collection Systematique. *Magellanes*, 148 pp.

Niisato T. (2001) A new Splendid Species of the genus *Pachyteria* (Coleoptera, Cerambycidae) from Sulawesi. *Elytra* 29 (2): 291-297.

Ritsema C. (1890) On some species of genus *Pachyteria* from the old collection of Thomson. *Notes from the Leyden Museum*, 12:163-173.

Ritsema C. (1896) Liste des espèces des genres *Zonopterus* et *Pachyteria* (Coléoptères Longicornes) de la collection du Muséum d'Histoire naturelle de Paris, *Bulletin du Muséum d'Histoire naturelle*, 7: 329-332.

Serville Audinet J.G. (1883) Nouvelle classification de la famille des Longicornes, 2^e tribu, Cérambycins, Cerambycini, *Annales de la Société Entomologique de France*, 2: 528-573

Baltic Journal of Coleopterology