Revision of the subgenus Dryopomera s. str. (Coleoptera: Oedemeridae)

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 $Taxonomy, Coleoptera, Oedemeridae, {\it Dryopomera}, new species, new status, new combinations, new synonymy, key, Palaearctic, Oriental$

Abstract. Species of the nominotypical subgenus *Dryopomera* Fairmaire are revised, illustrated and keyed and species-groups are proposed. The following new species are described: *Dryopomera* (*Dryopomera*) ceylonica sp. n. (Sri Lanka), *D.* (*D.*) sundaica sp. n. (Indonesia), *D.* (*D.*) tonkinensis sp. n. (Vietnam), *D.* (*D.*) longissima sp. n. (Nepal), *D.* (*D.*) nepalensis sp. n. (Nepal), *D.* (*D.*) malaccana sp. n. (Malaya), *D.* (*D.*) burmanica sp. n. (Burma), *D.* (*D.*) rugicollis sp. n. (Malaya) and *D.* (*D.*) malayana sp. n. (Malaya). The following new synonymies are proposed: *D.* (*D.*) innotata (Pic, 1943) = Mimoncomera innotata var. unicolor Pic, 1943, syn. n., and *D.* (*D.*) indica (Fairmaire, 1896) = Oncomera geniculata syn. n. *D.* (*D.*) notatipennis (Pic, 1915) comb. & stat. n. is raised to specific status from Oncomera geniculata var. notatipennis Pic, 1915. The following species are transferred to Dryopomera: *D.* (*D.*) ingeniculata (Pic, 1915) comb. n. and *D.* (*D.*) piceonotata (Pic, 1932) comb. n. from Oncomera Stephens; *D.* (*D.*) testaceipennis (Pic, 1932) comb. n. from Oedemera Olivier and *D.* (*D.*) coomani (Pic, 1925) comb. n. from Xanthochroa Schmidt.

INTRODUCTION

Species of the genus *Dryopomera* are distributed mainly in the Oriental region (only two species reach the border of the Palaearctic), where they appear to replace species of the genus *Oedemera* Olivier. Formerly they were, on the basis of affinities of their habiti, classified in 5 genera.

MATERIAL

Material on which this study is based is deposited in the following institutions and collections:

BMNH - British Museum (Nat. Hist.), London, Mr M.D. Kerley

IRSN - Institut Royal des Sciences Naturelles, Bruxelles, Dr L. Baert

MHNG - Muséum d'Histoire Naturelle, Genève, Dr C. Besuchet

MHNP - Muséum National d'Histoire Naturelle, Paris, Dr C. Girard

MS - collection of Prof. M. Satô, Nagoya Women's University, Nagoya

SMNS - Staatliches Museum für Naturkunde, Stuttgart, Dr W. Schawaller

VS - author's collection, Národní muzeum, Praha

ZMVZ - Zoologisch Museum, Universiteit van Amsterdam, Amsterdam, Dr B. Brugge.

Subgenus Dryopomera Fairmaire, 1897

Dryopomera Fairmaire, 1897: 238.

Type species: Dryops indica Fairmaire, 1896 (by monotypy).

Paroncomera Nakane, 1954: 179.

Type species: Paroncomera vatoi Nakane, 1954 (by monotypy and original designation).

Habitus similar to that of species of *Oedemera* subg. *Oncomera*. Colouration yellow to brown, sometimes with markings. Eyes large and strongly convex, head including eyes wider than pronotum. Antenna long and slender, apical antennal segment emarginate laterally. A rounded or oval area, more or less delimited, with dense and fine sensoric pubescence is situated in this emargination. Subhumeral vein of elytron not fused with lateral margin of elytron, however, it is connected with that margin by transverse striation. In one species there is a transverse connection between veins 3 and 4 in basal portion of elytron, similar to some *Oncomera* species. Sutural margin of male elytron slightly sinuate in some species. Hind femur of male mostly thickened. Aedeagus similar to that of *Oedemera*, subapical teeth of aedeagal apex situated dorsally, tegmen and projections of the IX. urite similar to that in *Oedemera* or modified. Female differs from the male by the unthickened hind femur and by the standard form of the last visible sternite, as is found in the tribe Oedemerini (cf. Švihla, 1985).

The genus *Dryopomera* differs from *Oedemera* s. lat. by the absence of apical spurs on the fore tibia. The subgenus *Mimoncomera* Pic differs from *Dryopomera* s. str. as follows:

Dryopomera s. str.

Acdeagus similar to that of *Oedemera*, subapical teeth situated dorsally.

Eyes relatively smaller, frons between eyes at most 1.7 times (0.80–1.66) narrower than between antennal pits in male and 1.5 times (0.88–1.50) in female.

Hind femur of male thickened in most species.

Sensoric area of apical antennal segment smaller and not strongly sharply delimited (cf. Švihla. 1985).

Abdominal sterna of malewithout ventral projection.

Dryopomera (Mimoncomera)

Aedeagus dissimilar to that of *Oedemera*, subapical teeth situated ventrally or absent.

Eyes relatively larger, frons between eyes at least 2.8 times (2.80–11.0) narrower than between antennal pits in male and 2.0 times (2.0–3.83) in female.

Hind femur of male never thickened.

Sensoric area of apical antennal segment larger, strongly delimited (cf. Švihla, 1985).

Abdominal sterna of male, in some species, with ventral projection.

Dryopomera (Dryopomera) notata (Pic, 1943)

Mimoncomera notata Pic, 1943: 7.

Colouration rather variable. Head yellow-brown, between and in front of eyes more or less dark brown, antennae brown. Pronotum brown to dark brown, in middle portion or only in anterior and posterior margins lighter. Elytra yellow-brown (apical spots sometimes lighter) with dark brown markings: a common subsutural spot connected laterally with longitudinal humeral stripe reaching approximately to elytral midlength, and a pair of supra-apical spots. Legs yellow to brown, fore legs and hind knees sometimes darker. Ventral part of body brown to dark brown, apex of abdomen lighter.

Male. Antenna almost extending to apex of elytron, apical antennal segment emarginate laterally beyond its midlength. Eyes strongly convex, head including eyes distinctly wider than pronotum, head between eyes slightly narrower than between antennal pits and distinctly narrower than between bases of first antennal segments. Surface of head microshagreened, finely punctate and pubescent, matt. Pronotum distinctly longer than wide,

slightly cordiform, with two depressions before middle, with slight longitudinal keel between them and with one praebasal depression. Surface of pronotum very finely coriaceous and pubescent, matt. Elytra narrowing posteriorly, sutural margin of elytron straight. Surface of elytra very finely coriaceous, densely pubescent, matt. Pubescence is oblique on dorsal surface of elytron, straight apically on lateral sides. Vein 4 reaches 1/3 to 1/2 of elytral length, without transverse connection with vein 3. Hind femur thickened, hind tibia slightly curved. Tegmen and aedeagus as in Figs 1–3.

Female. Eyes less convex, head including eyes slightly wider than pronotum. Apical abdominal segment as in Fig. 45, terminal portion of apical sternite slightly concave, with more strongly sclerotized margin.

Length ♂ ♀: 7.2–10.0 mm.

Type material examined: Syntypes: "Malay Penins., Pahang, F.M.S. (Federal Malay States), Fraser's Hill, 4200 ft., 18.ix.1936", $\,$ here designated as lectotype; the same locality, 4000 ft., 20.vii.1936, $\,$ designated as paralectotype (all MHNP).

ADDITIONAL MATERIAL EXAMINED: Malaya: Fraser's Hill: 20.vii.1987, M. Satô lgt., 3 ex. (VS); 4000–4200 ft., 3.vi.–6.vii.1931 and 1941, 13 ex.; Selangor, Bukit Kulu, 3300–3500 ft., 12.iii.–12.v.1931, at light, H.M. Pendlebury lgt., 3 ex.; Kedah Peak, 3300 ft., 24.iii.1928, 1 ex.; Perak, Larut Hills, 3700 ft., 8.ii.1932, at light, H.M. Pendlebury lgt., 1 ex. (all BMNH).

DISTRIBUTION: Malaysia (Malaya).

Dryopomera (Dryopomera) piceonotata (Pic, 1932) comb. n.

Oncomera piceonotata Pic, 1932: 118.

Male unknown.

Female. It does not differ from D. (D.) notata by any essential characters, with exception of the apical abdominal segment (Fig. 47): pygidium only slightly longer than the apical sternite in D. (D.) piceonotata, terminal portion of apical sternite slightly convex or flat, without a more strongly sclerotized margin.

Length ♀: 9.3–11.2 mm.

Type material examined: Holotype, \$\partial \text{, "Sumatra, Takengon, 9.v.1929, Prince Léopold Igt." (IRSN). Additional material examined: Borneo, Sabah: Crocker Range, 16 km N.W. of Keningau, 2.–10.ix.1982, S. Nagai Igt., 1 ex.; Mt. Kinabalu: 6.v.1980, Sakai Igt., 1 ex. (all VS); 1560 m, 15.–24.v.1987, A. Smetana Igt., 1 ex.; Liwagu Trail, 22.v.1987, Burckhart et Löbl Igt., 1 ex. (all MHNG). Distribution: Malaysia (northern Kalimantan), Indonesia (Sumatra).

Dryopomera (Dryopomera) ceylonica sp. n.

Male unknown.

Female. Very similar to *D.* (*D.*) notata and *D.* (*D.*) piceonotata, from which it differs as follows: subhumeral stripe on elytron narrowly connected with supra-apical spot, pubescence of elytra sparser and shorter, abdomen yellow, ventrolaterally bordered black, sutural margin of elytron slightly sinuate, apical abdominal segment as in Fig. 49, apical sternite slightly convex and its apex is shallowly emarginate.

Type Material: Holotype, ♀, "Ceylon, Woodside (southeastern Ceylon), Urugalla, 15.iv.1923" (BMNH).

DISTRIBUTION: Sri Lanka.

Name DERIVATION: Named after its type locality.

Oncomera geniculata var. notatipennis Pic, 1915: 6.

Body completely yellow-brown to brown, only hind knees of male sometimes darkened. Male. Antenna extending to 2/3 of elytral length, apical antennal segment emarginate laterally beyond its midlength. Eyes convex, head, including eyes, slightly wider than pronotum, head between eyes approximately as wide as between antennal pits and slightly narrower than between bases of first antennal segments. Surface of head very finely punctate and pubescent, semilustrous to lustrous. Pronotum longer than wide, slightly cordiform, with two distinct depressions before middle, without longitudinal keel between them and with slightly shallower praebasal depression. Surface of pronotum, like the head, punctate and pubescent, semilustrous to lustrous. Elytra moderately narrowing posteriorly, sutural margin of elytron very slightly sinuate in posterior half. Surface of elytra finely coriaceous and pubescent, matt. Elytral vein 4 reaches 1/4 to 1/2 of elytral length, without transverse connection with vein 3. Hind femur more or less thickened, hind tibia very slightly curved. Tegmen and aedeagus as in Figs 10–12.

Female. Apical abdominal segment as in Fig. 43, terminal portion of apical sternite slightly concave, with more sclerotized margin, semilustrous.

Length ♂ ♀: 8.3–14.5 mm.

Type MATERIAL EXAMINED: Syntypes: "Ind. or., Trichinopoli" (eastern India, Tiruchchirappalli), 5 \(\) (MHNP). Type series consists of two species. Four specimens, here designated as paralectotypes, belong to D. (D.) indica, the last one, designated as lectotype, to D. (D.) notatipennis. This way of designation enables the preservation of the specific name notatipennis.

Additional material examined: India, Nilghiri Hills: H.L. Andrewes Igt., 10 ex.; A.K.W. Downing Igt., 7 ex.; G.F. Hampson Igt., 9 ex.; T.V. Campbell Igt., 2 ex. (all BMNH).

DISTRIBUTION: Southern India.

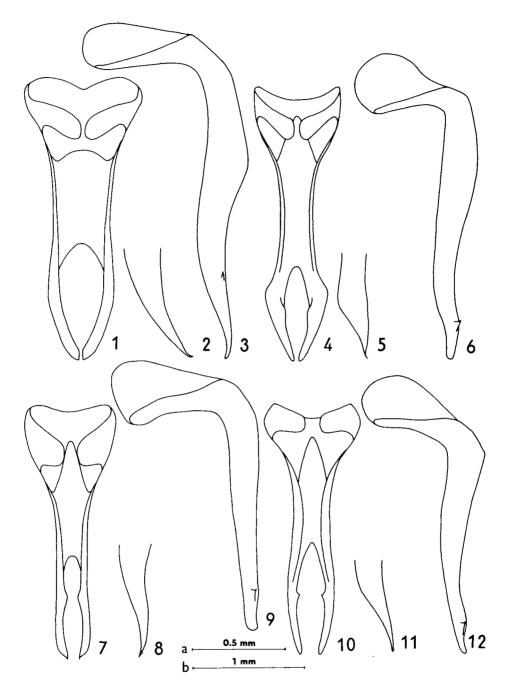
Dryopomera (Dryopomera) sundaica sp. n.

Body yellow, head between and in front of the eyes dark brown to black, tibiae at least slightly darkened in basal half.

Male. Antennae damaged in examined specimens, but are assumed to extend to the apex of elytra. Eyes strongly convex, head including eyes rather wider than pronotum, head between eyes almost twice narrower than between antennal pits. Surface of head very finely microshagreened, finely and sparsely punctate and pubescent, semilustrous to lustrous. Pronotum rather longer than wide, slightly cordiform, with two shallow depressions before middle, without longitudinal keel and with very shallow praebasal depression. Surface of pronotum, like the head, punctate and pubescent, lustrous. Elytra narrowed posteriorly, sutural margin of elytron slightly sinuate. Surface of elytra finely coriaceous and pubescent, matt. Vein 4 reaches elytral midlength, without transverse connection with vein 3. Hind femur thickened, hind tibia bent. Tegmen and aedeagus as in Figs 7–9.

Female. Eyes slightly less convex, antenna extending to elytral apex, apical antennal segment emarginate laterally, beyond its midlength. Elytra slightly wider than in male. Apical abdominal segment very similar to that of *D.* (*D.*) *piceonotata*, terminal portion of apical sternite slightly concave, with more strongly sclerotized margin.

Length ♂ ♀: 8.2–11.1 mm.



Figs 1–12. Tegmen in ventral and lateral views, aedeagus in lateral view. 1–3: *Dryopomera* (*D*.) *notata*; 4–6: *D*. (*D*.) *innotata*; 7–9: *D*. (*D*.) *sundaica* sp. n.; 10–12: *D*. (*D*.) *notatipennis*. Scale a – Figs 1–9; b – Figs 10–12.

Type Material: Holotype, \eth , "Java, Meuwen Bay, détr. de la sonde, 1878, Raffray et Maindron lgt." (MHNP); paratypes: "Java: Monts Preangers, 1878, Raffray et Maindron lgt.", $1 \Im$ (MHNP); "E. Java, Samberbates, Res. Kediri", $1 \Im$ (BMNH); "Noesa Kambangan I., 1.x.1928, C. Drescher lgt.", $1 \Im$ (ZMVA); "Sumatra's Westkust (western Sumatra), Tandjunggadang, 1000 m, 1926, E. Jacobson lgt.", $1 \Im$ (ZMVA).

DISTRIBUTION: Indonesia (Sumatra, Java, Kambangan I.).

Name derivation: Named according to its distribution.

It differs from other species of *Dryopomera* s. str. by the form of male genitalia and by other characters given in the key.

Dryopomera (Dryopomera) innotata (Pic, 1943)

Mimoncomera innotata Pic, 1943: 7.

Mimoncomera innotata var. unicolor Pic, 1943: 7, syn. n.

Very similar to *D*. (*D*.) sundaica sp. n. in its habitus and colouration, from which it differs by the different form of the tegmen and aedeagus (Figs 4–6) and by the colouration of the head, which is not darker between eyes than beyond them.

Length 39:8.1-10.2 mm.

Type material examined: *M. innotata*: holotype, \$\mathbb{Q}\$, "Malay Penins., Pahang, F.M.S. (Federal Malay States), Fraser's Hill, 4200 ft., 31.vii.1936, at light" (MHNP).

Additional material examined: Malaya: Fraser's Hill: 20.vii.1987, M. Satô lgt., 4 ex. (MS, VS); 4000 ft., 2.vi.1941, 3 ex.; 6.vii.1931, 1 ex.; Kedah Peak, 23.–28.ii.1928, 2 ex. (BMNH).

DISTRIBUTION: Malaysia (Malaya).

Type material of M. innotata var. unicolor was not found. However, the colouration of tibia varied in available specimens of D. (D.) innotata and, thus, the two are placed in synonymy.

Dryopomera (Dryopomera) tonkinensis sp. n.

Head yellow, between eyes slightly darkened, antenna yellow, pronotum yellow, anterolateral sides dark brown. Legs yellow, subterminal part of femora, knees and central part of tibiae darker. Scutellum yellow, elytra yellow, dark brown laterally and on the basal part of suture. Yellow portion of elytra with a number of small, irregular, not sharply delimited, light brown areas, yellow colouration changing to form a number of small yellow spots on a lateral, dark brown portion.

MALE. Antenna extending to 2/3 of elytral length, apical antennal segment emarginate laterally beyond its midlength. Eyes strongly convex, head including eyes rather wider than pronotum, space between eyes slightly narrower than between antennal pits and distinctly narrower than between bases of first antennal segments. Surface of head very finely coriaceous, finely punctate and pubescent, matt. Pronotum distinctly longer than wide, cordiform, with two shallow depressions before the middle, without a longitudinal keel between them and with one shallow praebasal depression. Surface of pronotum very finely coriaceous, finely punctate and pubescent, on the disc matt, anterolaterally semilustrous. Elytra slightly narrowing posteriorly, sutural margin straight. Surface of elytra finely coriaceous and pubescent, matt. Vein 4 visible only in basal portion of elytron, posteriorly becoming vestigial and/or absent, without transverse connection with vein 3. Hind femur strongly thickened, hind tibia curved. Tegmen and aedeagus as in Figs 13–15.

Female unknown.

LENGTH ♂: 10.7 mm.

Type material: Holotype, &, "Vietnam, Tam Dao, 20.xi.1976, J. Haager lgt." (VS).

DISTRIBUTION: Northern Vietnam.

Name Derivation. Derived from Tonkin, historical name for northern part of Vietnam. Named according to its type locality.

Due to its conspicuous colouration it cannot be confused with any other known species within the genus. The male genitalia are also different from other species of the genus.

Dryopomera (Dryopomera) yatoi yatoi (Nakane, 1954)

Paroncomera yatoi Nakane, 1954: 179.

Antenna-yellow brown, terminal portion of segments from the segment 4 darkened. Head, pronotum, scutellum and ventral part of body yellow-brown to brown, legs yellow brown, apices of femora, knees and apices of tibiae dark brown. Elytra dark brown with basal part of suture lighter or completely dark brown.

MALE. Antenna slightly extending beyond elytral midlength, apical antennal segment emarginate laterally from its midlength. Eyes convex, head, including eyes, slightly wider than pronotum, head between eyes very slightly narrower than between antennal pits and distinctly narrower than between bases of first antennal segments. Surface of head very finely microshagreened, finely punctate and pubescent, semilustrous. Pronotum moderately longer than wide, cordiform, with two shallow depressions in front of the middle, without longitudinal keel between them and with shallow praebasal depression. Surface of elytra finely coriaceous and pubescent, matt. Elytra almost parallel-sided, sutural margin of elytron straight. Vein 4 reaches 2/3 of elytral length, without transverse connection with vein 3. Hind femur slightly thickened, hind tibia very slightly curved. Tegmen and aedeagus as in Figs 16–18.

Female (according to the original description). Apical abdominal sternite similar to that of D. (D.) longissima sp. n. (Fig. 46).

Length $3 \circ 11.0-14.0$ mm.

Material examined: Formosa, Palin, Taoyuan Hsien, 25.iv.1982, N. Ohbayashi Igt., 13 (MS). Distribution: Japan (Honshu, Shikoku, Kyushu, Tokara Is.) according to Miyatake (1985), Taiwan.

Specimen examined slightly differs from the original description by its lighter colouration of pronotum and by the entirely brown elytra.

Dryopomera (Dryopomera) yatoi tokarensis (Nakane, 1954)

Paroncomera yatoi tokarensis Nakane, 1954: 180.

No material was examined. Described according to one female from Tokara Is. The differences between it and the nominotypical subspecies in the form of apical abdominal sternite may represent individual variability, even more because both subspecies are reported by Miyatake (1985) from Tokara Is. It is necessary to examine larger material to solve the status of this taxon.

Dryopomera (Dryopomera) indica (Fairmaire, 1896)

Dryops indica Fairmaire, 1896: 54. Dryopomera indica: Fairmaire, 1897: 238. Oncomera geniculata Pic, 1908: 229, syn. n. Very similar to *D.* (*D.*) notatipennis in its habitus and colouration, from which it differs by the darkened lateral sides of pronotum, by the sometimes slightly lighter venation of the elytra and, especially, by the different form of the tegmen and aedeagus (Figs 25–27) and by the form of the last abdominal segment of female (Fig. 48). Last sternite of female convex, with more strongly sclerotized margin.

Length 3 9: 8.7–11.4 mm.

Type material examined: O. geniculata: Holotype, ♂, "Bhanebanor" (MHNP).

Additional material examined: India: Kodai Kanal (Anamalai Mts.), T.V. Campbell Igt., 7 ex. (BMNH, VS); Nilghiri Hills, T.V. Campbell Igt., 1 ex. (BMNH); Trichinopoli (Tiruchchirappalli), 4 ex., paralectotypes of *O. geniculata* var. *notatipennis* (MHNP).

DISTRIBUTION: Southern India.

Type material of D. (D.) indica was not found, but available material agrees well with the original description (it is the only known known species from southern India with darkened lateral sides of pronotum), so the synonymy of D. geniculata appears justified.

Dryopomera (Dryopomera) longissima sp. n.

Head yellow-brown to brown, between and before eyes sometimes darker, antennae brown. Pronotum brown with median, longitudinal, yellow-brown stripe, scutellum yellow-brown to brown, subterminal portions of femora and knees darker. Elytra brown, lateral part of each elytron dark brown, vein 3, a number of small spots on the whole surface and sometimes also apex of elytron lighter. Ventral part of body brown to dark brown, apical abdominal segment sometimes lighter.

Male. Antenna extending to almost 2/3 of elytral length, apical antennal segment emarginate laterally and slightly curved from 1/3 of its length. Eyes convex, head including eyes only very slightly wider than pronotum, head between eyes slightly narrower than between antennal pits and distinctly narrower than between bases of first antennal segments. Surface of head finely punctate and pubescent, semilustrous. Pronotum distinctly longer than wide, slightly cordiform, with two shallow depressions before middle, without any longitudinal keel between them and with shallow praebasal depression. Surface of pronotum, like the head, punctate and pubescent, semilustrous. Elytra narrowed posteriorly, sutural margin of elytron slightly sinuate. Surface of elytra finely coriaceous and pubescent, semilustrous. Vein 4 slightly developed only in basal part, sometimes quite absent, without transverse connection with vein 3. Hind femur very slightly but distinctly thickened, hind tibia almost straight. Tegmen and aedeagus as in Figs 28–30.

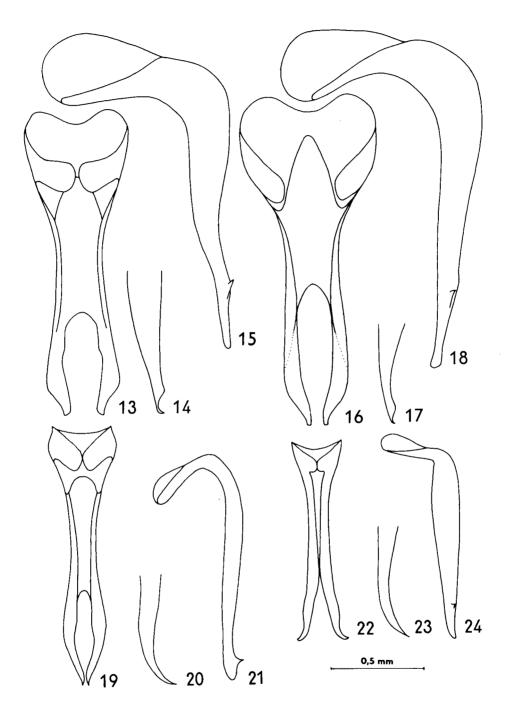
Female. Apical antennal segment emarginate from its midlength, not curved. Elytra slightly wider than in male, less narrowing posteriorly. Apical abdominal segment as in Fig. 46, terminal portion of apical sternite slightly concave with a more sclerotized margin.

LENGTH & 9: 16.7–18.1 mm.

Type material: Holotype, \eth , "East Nepal, Solokhumbu Dist., Manidingma, 2240 m, 8.x.1979, by light trap, M. Tomokuni lgt." (MS); paratypes: "C. Nepal, Parbat Dist., Hinki Doban – Hinku Himalay, 19.x.1981, M. Tomokuni lgt.", $\eth \Upsilon$ (MS, VS); "Thakkhola, 2600 m, Lethe, xii.1969, Nepal-Expedit. Jochen Martens", $\eth \Upsilon$ (SMNS, VS); "W. Sikkim, Choka, 3050 m, 23.ix.1983, M. Tomokuni lgt.", Υ (MS).

DISTRIBUTION: Nepal, Sikkim.

Name derivation: Derived from Latin longissimus – the longest.



Figs 13–24. Tegmen in ventral and lateral views, aedeagus in lateral view. 13–15: *Dryopomera (D.) tonkinensis* sp. n.; 16–18: *D. (D.) yatoi*; 19–21: *D. (D.) nepalensis* sp. n.; 22–24: *D. (D.) malaccana* sp. n.

On the basis of its size and colouration it cannot be confused with any other species of the genus. Male genitalia are also quite different (cf. Figs 28–30).

Dryopomera (Dryopomera) nepalensis sp. n.

Head brown, in front of the eyes yellow-brown, antenna brown. Pronotum brown, areas on anterior margin and on praebasal depression slightly lighter. Elytra brown, humeral part and venation slightly lighter. Legs yellow-brown, subterminal portion of femora slightly darkened. Ventral part of body yellow-brown.

MALE. Antenna extending to 2/3 of elytral length, apical antennal segment emarginate laterally beyond its midlength. Eyes convex, head including eyes distinctly wider than pronotum, head between antennal pits slightly narrower than between bases of first antennal segments. Surface of head very finely coriaceous, finely punctate and pubescent, almost matt. Pronotum distinctly longer than wide, slightly cordiform, with two shallow depressions before middle, without longitudinal keel between them and with shallow praebasal depression. Surface of pronotum finely coriaceous and pubescent, matt. Elytra narrowed posteriorly, sutural margin of elytron slightly sinuate. Surface of elytra finely coriaceous and pubescent, matt. Vein 4 extending to almost 2/3 of elytral length, without transverse connection with vein 3. Hind femur not thickened, hind tibia very slightly curved. Tegmen and aedeagus as in Figs 19–21.

Female unknown.

LENGTH **♂**: 10.1 mm.

TYPE MATERIAL: Holotype, &, "Nepal, Prov. Bagmati, Malemchi Khola nr. Malemchi, 2100 m, 15.iv.1981, I. Löbl et A. Smetana lgt." (MHNG).

DISTRIBUTION: Nepal.

Name derivation: Named according to its type locality.

It differs from other species of the genus by the form of tegmen and aedeagus and by other characters given in the key.

Dryopomera (Dryopomera) malaccana sp. n.

Head brown with yellow-brown mouthparts, rest of the body entirely yellow.

MALE. Antenna long, extending to apex of elytra. Apical antennal segment emarginate laterally beyond its midlength. Eyes strongly convex, head including eyes rather wider than pronotum, head between eyes almost half as wide as between antennal pits. Surface of head very finely microshagreened, finely and sparsely punctate and pubescent, semilustrous. Pronotum distinctly longer than wide, slightly cordiform, with two shallow depressions in front of the middle, without longitudinal keel between them and with shallow praebasal depression. Surface of pronotum very finely and sparsely punctate and pubescent, lustrous. Elytra slightly narrowed posteriorly, sutural margin of elytron very slightly sinuate. Vein 4 almost extends to elytral midlength, without transverse connection with vein 3. Hind femur slightly thickened, hind tibia curved. Tegmen and aedeagus as in Figs 22–24.

Female unknown.

LENGTH ♂: 6.4 mm.

Type material: Holotype, ♂, "Presque'ille de Malacca (Malacca Isthmus), 1899, Errington de la Croix et P. Chapé lgt." (MHNP).

DISTRIBUTION: Malaysia (Malaya).

Name derivation: Named according to its type locality.

It differs from all similar species of the genus by its very small size, by its long antenna and, especially, by the form of male genitalia.

Dryopomera (Dryopomera) burmanica sp. n.

Head yellow, beyond eyes brown, antenna yellow, darkened terminally. Pronotum brown with wide, median, yellow longitudinal stripe. Legs yellow, apices of tibiae brown, femora subterminally very slightly darkened. Elytra brown, suture, venation, apical spot and a number of small spots on the whole surface yellow. Ventral part of body yellow-brown to brown.

Male. Antenna only slightly extending beyond the midlength of elytra, apical antennal segment emarginate laterally from its midlength, slightly curved. Eyes strongly convex, head including eyes rather wider than pronotum, head between eyes approximately as wide as between antennal pits and slightly narrower than between bases of first antennal segments. Surface of head very finely coriaceous, finely punctate and pubescent, almost matt. Pronotum slightly longer than wide, almost parallel-sided, with two shallow depressions before middle, without longitudinal keel between them and with one praebasal depression. Surface of pronotum, like the head, sculptured and pubescent, almost matt. Elytra only slightly narrowed posteriorly, sutural margin of elytron very slightly sinuate. Surface of elytra finely coriaceous and pubescent, matt. Vein 4, approximately, extends to the midlength of elytron, but vestigial for parts of its length, subbasal transverse connection with vein 3 developed. Hind femur not thickened, hind tibia straight. Tegmen and aedeagus as in Figs 31–33.

Female. Eyes less convex, head including eyes slightly wider than pronotum. Apical abdominal segment as in Fig. 44.

LENGTH ♂ ♀: 10.7–13.3 mm.

TYPE MATERIAL: Holotype, ♂, "Burma, Mishmi Hills, Lohit river, 24.iii 1935, M. Steele lgt."; paratype, ♀, "Upper Burma, Seinghku valley, Mam Tamai, 28°05′N 97°30′E, 3000 ft., v.1926, F.K. Ward lgt." (all BMNH).

DISTRIBUTION: Northern Burma.

Name derivation: Named according to its type locality.

It differs from somewhat similar D. (D.) longissima sp. n. by its smaller size, by the unthickened femur in the male and by the different form of the tegmen and aedeagus.

Dryopomera (Dryopomera) testaceipennis (Pic, 1922) comb. n.

Oedemera testaceipennis Pic, 1922: 170.

Body yellow, ventral part sometimes more or less brown. Basal antennal segment sometimes darker, tibiae always darker, brown to dark brown.

MALE. Antenna distinctly extending beyond the apex of the elytra, apical antennal segment emarginate laterally beyond its midlength. Eyes strongly convex, head including eyes distinctly wider than pronotum, head between eyes slightly narrower than between antennal pits and distinctly narrower than between bases of first antennal segments. Surface of head finely punctate and pubescent, semilustrous to lustrous. Pronotum distinctly longer than wide, slightly cordiform, with two shallow depressions before middle, without

longitudinal keel between them and with one very shallow praebasal depression. Surface of pronotum, like the head, punctate and pubescent, semilustrous to lustrous. Elytra narrowed posteriorly, sutural margin of elytron slightly sinuate. Surface of elytra finely coriaceous and pubescent, matt. Elytral vein 4 extending to midlength of elytra, without transverse connection with vein 3. Hind femur not thickened, hind tibia very slightly bent or straight. Tegmen and aedeagus as in Figs 34–36.

Female. Eyes slightly less convex, antenna shorter, reaches approximately elytral apex. Apical abdominal segment very similar to that of D. (D) piceonotata, terminal portion of apical sternite flat or very slightly concave, with very slightly stronger sclerotized margin.

Length ♂ ♀: 6.8-8.5 mm.

Type material examined: Syntypes: "Tonkin (northern Vietnam), Hoa Binh", 2δ ; "Tonkin, Env. de (environment of) Hoa Binh, 1901, J. Laisi Igt.", 19 (all MHNP). One male is here designated as lectotype, the other two specimens as paralectotypes.

Additional material examined: Vietnam, Tonkin: Hoa Binh, 1 ex.; Hoa Binh region, 1919, 1 ex. (all MHNP).

DISTRIBUTION: Northern Vietnam.

Dryopomera (Dryopomera) rugicollis sp. n.

Head yellow-brown to brown, between eyes sometimes dark brown, antennae yellow-brown to brown. Pronotum brown, laterally dark brown. Elytra yellow-brown, legs yellow-brown to brown, ventral part of body brown.

Male. Antennae partly damaged in examined specimen, but are assumed to extend beyond elytral apex. Eyes strongly convex, head including eyes distinctly wider than pronotum, head between eyes very slightly narrower than between antennal pits and rather narrower than between bases of first antennal segments. Surface of head very finely coriaceous, finely punctate and pubescent, matt. Pronotum slightly longer than wide, cordiform, with two very shallow depressions before middle, without longitudinal keel between them and with one shallow praebasal depression. Surface of pronotum finely coriaceous, relative to other species of the genus densely punctate, sparsely pubescent, matt. Elytra very slightly narrowed posteriorly, sutural margin of elytron very slightly sinuate. Surface of elytra finely coriaceous and pubescent, matt. Vein 4 developed only in basal third of elytron, without transverse connection with vein 3. Hind femur very slightly thickened, hind tibia slightly curved. Tegmen and aedeagus as in Figs 37–39.

Female. Antenna extending to elytral apex, apical antennal segment emarginate laterally beyond its midlength. Sutural margin of elytron straight. Apical abdominal segment similar to that of D. (D.) burmanica sp. n., only pygidium is slightly shorter, terminal portion of apical sternite slightly concave, with more strongly sclerotized margin.

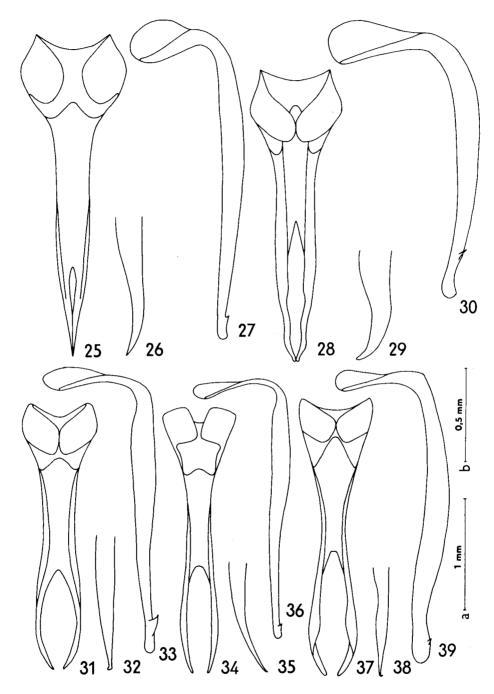
Length ♂ ♀: 8.6–11.0 mm.

Type material: Holotype, δ , "Malay Penins., Pahang, F.M.S. (Federal Malay States), Fraser's Hill, 4000 ft., 3.vi.1941"; paratypes: the same locality, 30.vi.1933, 1 $^{\circ}$; 22.vii.1936, 1 $^{\circ}$; vi.1930, V.N. Riley lgt., 1 $^{\circ}$; "Malay Penins., Selangor, Bukit Kulu, 3500 ft., 15.iii.1931, at light, H.M. Pendlebury lgt.", 1 $^{\circ}$ (all BMNH).

DISTRIBUTION: Malaysia (Malaya).

Name Derivation: Derived from Latin rugosus – rugose and collum – pronotum (metaphorical). Named according to its coriaceous, matt pronotum.

It differs from other species of *Dryopomera* s. str. by the form of male genitalia (cf. Figs 37–39) and by other characters given in the key.



Figs 25–39. Tegmen in ventral and lateral views, aedeagus in lateral view. 25–27: *Dryopomera (D.) indica*; 28–30: *D. (D.) longissima* sp. n.; 31–33: *D. (D.) burmanica* sp. n.; 34–36: *D. (D.) testaceipennis*; 37–39: *D. (D.) rugicollis* sp. n. Scale a – Figs 28–30; b – Figs 25–27, 31–39.

Dryopomera (Dryopomera) malayana sp. n.

Body entirely yellow, fore and middle femur slightly darkened along its upper surface, hind femur on its upper surface and tibia entirely black-brown.

MALE. Antenna almost extending to elytral apex, apical antennal segment emarginate laterally from its midlength. Eyes strongly convex, head including eyes rather wider than pronotum, head between eyes almost twice narrower than between antennal pits. Surface of head very finely punctate and pubescent, semilustrous. Pronotum longer than wide, slightly cordiform, with two shallow depressions before middle, without longitudinal keel between them and with shallow praebasal depression. Surface of pronotum, like the head, punctate and pubescent, lustrous. Elytra slightly narrowed posteriorly, sutural margin of elytron slightly sinuate. Surface of elytra finely wrinkled and pubescent, matt. Vein 4 does not extend to midlength of elytron, without transverse connection with vein 3. Hind femur slightly thickened, hind tibia slightly bent. Tegmen and aedeagus as in Figs 40–42.

Female unknown.

Length ♂: 8.2 mm.

Type material: Holotype, &, "Malaya, Pahang, Selangor, (locality illegible), light, 9.vi.1927" (BMNH).

DISTRIBUTION: Malaysia (Malaya).

Name derivation: Named according to its type locality.

It differs from other species of *Dryopomera* s. str. by its dark colouration of hind legs and especially by the form of male genitalia.

Dryopomera (Dryopomera) ingeniculata (Pic, 1915) comb. n.

Oncomera ingeniculata Pic, 1915: 7.

MALE unknown.

FEMALE: Very similar to D. (D.) notatipennis in her habitus, differring by a slightly more robust body and, particularly, by the different form of the last abdominal segment, which is very similar to that of D. (D.) piceonotata, only the apex of pygidium is more rounded, the terminal portion of apical sternite is slightly concave and with a more sclerotized margin.

Length ♀: 9.2–11.0 mm.

Type material examined: Holotype, \$\varphi\$, "Inde, Madura (southern India, Madurai), Shembaganur" (MHNP).

ADDITIONAL MATERIAL EXAMINED: India, N. Kanara (Distr.) (northern Sahyadri region), T.R. Bell lgt., 1 ex. (BMNH).

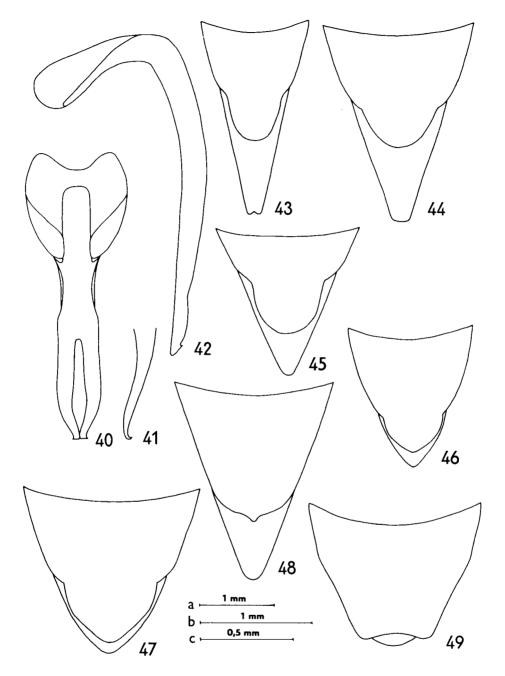
DISTRIBUTION: Southern India.

Dryopomera (Dryopomera) coomani (Pic, 1925) comb. n.

Xanthochroa coomani Pic, 1925: 301.

MALE unknown.

Female is very similar to D. (D.) testaceipennis, from which it differs by the colouration of femora, the upper surface of which is more or less darkened and by its larger body. These characters appear to justify provisional specific status, before the male will be available.



Figs 40–49. 40–42: Dryopomera~(D.)~malayana~sp.~n., tegmen in ventral and lateral views, aedeagus in lateral view. 43–49: Female apical abdominal segment, ventral view. 43 – D.~(D.)~notatipennis;~44 – D.~(D.)~burmanica~sp.~n.;~45 – D.~(D.)~notata;~46 – D.~(D.)~longissima~sp.~n.;~47 – D.~(D.)~piceonotata;~48 – D.~(D.)~indica;~49 – D.~(D.)~ceylonica~sp.~n. Scale a – Figs 43, 46; b – Figs 44–45; 47–49; c – Figs 40–42.

Length ♀: 9.1–12.6 mm.

Type material examined: Syntypes, "Hoa Binh" (northern Vietnam), 29 (MHNP), one of them is here designated as lectotype, the second one as paralectotype.

ADDITIONAL MATERIAL EXAMINED: Vietnam, Tonkin, Pho Vi, iv.1907, 1 ex. (MHNP).

DISTRIBUTION: Northern Vietnam.

Key to species - males

	• • •
1	Elytra excluding of apical spot and venation with markings
2	Hind femur not thickened, transverse connection between veins 3 and 4 developed, tegmen and ae-
_	deagus as in Figs $31-33$
3	Larger species (above 16 mm), elytra brown with a number of small lighter spots, tegmen and aedea-
	gus as in Figs 28–30
4	Elytra densely pubescent, basal colouration of elytra yellow with two pairs of subbasal and supraapical brown spots and with longitudinal, humeral brown stripe, slightly exceeding elytral midlength,
	tegmen and aedeagus as in Figs 1–3
	which coalesce in central portion and become separated laterally, tegmen and aedeagus as in Figs
5	13–15 D. (D.) tonkinensis sp. n. Elytra brown to dark brown 6
	Elytra yellow
6	Elytra dark brown, suture sometimes lighter basally, legs yellow, knees and apices of tibiae dark
	brown, tegmen and aedeagus as in Figs 16–18
	Elytra light brown
7	Apical portion of tegmen bent dorsally, parameres not flattened (Figs 19–20), aedeagus as in Fig. 21
_	Apical portion of tegmen straight, parameres flattened (Figs 37–38), aedeagus as in Fig. 39
8	
_	Hind femur not thickened, tegmen and aedeagus as in Figs 34–36 D. (D.) testaceipennis
9	Paramera with inner subterminal fold or tooth
	Paramera without inner subterminal fold or tooth
10	Paramera with inner subterminal tooth (Fig. 10), aedeagus strongly curved (Fig. 12), legs completely
	yellow D. (D.) notatipennis
_	Paramera with inner subterminal fold, aedeagus straight or slightly curved, tibiae at least slightly darkened
11	Paramera with inner subterminal fold, its outer margin almost straight (Fig. 7), aedeagus straight (Fig. 9)
	Paramera with slight inner fold, dilated externally (Fig. 4), aedeagus slightly curved (Fig. 6)
12	Parameres apically divergent (Fig. 22), aedeagus as in Fig. 24
13	Paramera apically tapered, without dorsal tooth (Figs 25–26), aedeagus as in Fig. 27, hind femur and
••	tibia yellow, only knee darker
	Paramera apically not tapered, with dorsal tooth (Figs 40–41), aedeagus as in Fig. 42, hind femur and tibia dark brown

Male unknown: D. (D.) piceonotata, D. (D.) ceylonica sp. n., D. (D.) ingeniculata and D. (D.) coomani.

Key to species - females

1 - 2 - 3	Elytra excluding of apical spot and venation with markings
_	apical sternite (Fig. 46)
	D. (D.) burmanica sp. n. Apical abdominal sternite shallowly emarginate terminally (Fig. 49) D. (D.) ceylonica sp. n.
4	Apical abdominal sternite snanowly emarginate terminally (Fig. 49) D. (D.) ceytonica sp. ii. Apical abdominal sternite rounded terminally 5
	Pygidium almost of the same length as the apical sternite (Fig. 47), its terminal portion not concave
_	Pygidium distinctly longer than the apical sternite (Fig. 45), its terminal portion slightly concave
	D. (D.) notata
6	Elytra dark brown, sometimes with lighter suture in basal portion
_	Elytra yellow to yellow-brown
7	Apical abdominal sternite not narrowed in its terminal portion, with small projection on apex (Fig.
	48), vaulted
_	Apical abdominal sternite narrowed in its terminal portion, rounded apically
8	Pronotum finely and densely coriaceous, matt, apical abdominal segment similar as in Fig. 44
	D. (D.) rugicollis sp. n. Pronotum finely and sparsely punctate, semilustrous to lustrous
	Legs completely yellow
9	Legs partly brown
10	Pygidium distinctly longer than the apical sternite (Fig. 43)
10	Pygidium only very slightly longer than the apical sternite
11	Eyes less convex, head including eyes only very slightly wider than pronotum
11	Lyes less convex, nead merading of only very singlify mean profession. D. (D.) ingeniculata
	Eyes strongly convex, head including eyes distinctly wider than pronotum D. (D.) innotata
12	Femora on its upper surface longitudinally darkened
	Femora completely yellow
13	Head at least between eyes darker than beyond eyes
	Head between eyes of the same colour as beyond eyes
14	Tibiae unicolourous, brown to dark brown
_	Terminal portion of tibiae lighter than basal 2/3

Female unknown: D. (D.) nepalensis sp. n., D. (D.) tonkinensis sp. n., D. (D.) malaccana sp. n. and D. (D.) malayana sp. n.

DISCUSSION

Species of the subgenus *Dryopomera* s. str. may be grouped especially according to the affinities of male genitalia as follows:

1. D. (D.) notatipennis group. Both tegmen and aedeagus robust, cross section of paramera rounded, apex of paramera not tapered, with distinct to very slight dorsal tooth. Hind femur of male thickened to strongly thickened. This group includes: D. (D.) yatoi, D. (D.)

- tonkinensis sp. n., D. (D.) notatipennis, D. (D.) sundaica sp. n., D. (D.) innotata and D. (D.) notata. Distribution: Throughout the area of the genus.
- 2. *D.* (*D.*) *indica* group. Both tegmen and aedeagus slender, cross section of paramera rounded, apex of paramera more or less tapered, without any dorsal tooth. Hind femur slightly thickened. This group includes: *D.* (*D.*) *longissima* sp. n., *D.* (*D.*) *nepalensis* sp. n., *D.* (*D.*) *indica* and *D.* (*D.*) *malaccana* sp. n. Distribution: Indian subcontinent, Malaya.
- 3. D. (D.) testaceipennis group. Both tegmen and aedeagus slender, paramera more or less flat in cross section, apex of paramera with dorsal tooth. Hind femur not to slightly thickened. This group includes: D. (D.) testaceipennis, D. (D.) burmanica sp. n. and D. (D.) rugicollis sp. n. Distribution: Burma, northern Vietnam, Malaya.
- 4. *D.* (*D.*) malayana group. The only species of this group is characterised as follows: tegmen and aedeagus slender, paramera flat in cross section, apex of paramera not tapered, with dorsal tooth, teeth of aedeagus situated very near the apex. Hind femur slightly thickened. Distribution: Malaya.

Position in the group uncertain (male unknown): *D.* (*D.*) *piceonotata*, *D.* (*D.*) *ceylonica* sp. n., *D.* (*D.*) *ingeniculata* and *D.* (*D.*) *coomani.*

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