

Koleopterologische Rundschau	69	55 - 65	Wien, Juni 1999
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Revision of the East Palaearctic and Oriental species of *Philonthus* STEPHENS part 2. The *spinipes* and *cinctulus* groups (Coleoptera: Staphylinidae, Staphylininae)

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Abstract

The *spinipes* and *cinctulus* groups of the genus *Philonthus* STEPHENS, 1829 (Coleoptera: Staphylinidae) are treated, at present comprising four species. One species is described as new: *Philonthus denti-phallus* (China: Guizhou). *Philonthus bipunctatus* BERNHAUER, 1911 and *P. pubipennis* CAMERON, 1919 are placed in synonymy with *P. industanus* FAUVEL, 1903. *Philonthus cinctulus* ab. *andrewesi* CAMERON, 1920 is reconstituted as distinct species. The male genitalia of all species and morphological details of some species are illustrated. A combined key to the species of both groups is provided.

Key words: Coleoptera, Staphylinidae, Staphylininae, Staphylinini, Philonthina, *Philonthus*, *spinipes* group, *cinctulus* group, new species, new synonymy, systematics, taxonomy, zoogeography.

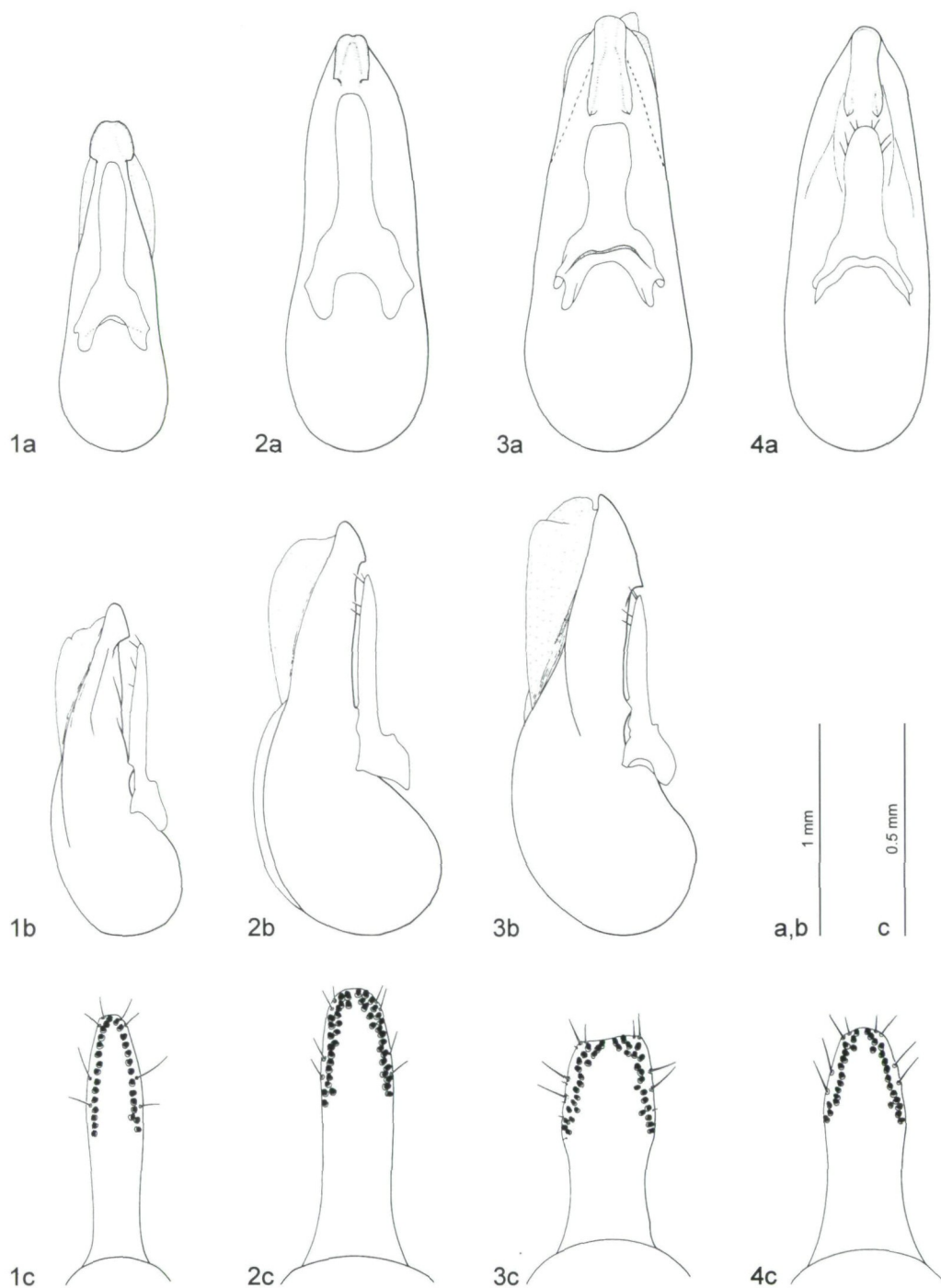
Introduction

The second part of the revision of the East Palaearctic and Oriental species of *Philonthus* STEPHENS, 1829 deals with the *spinipes* and *cinctulus* groups. At least one species (*P. spinipes* SHARP) has been placed in close relationship with the species group of *P. politus* s.l. (*furvus* group sensu SMETANA 1995). Actually this species, together with *P. industanus* FAUVEL and a new species, forms a well defined monophyletic group (See "Remarks" under the diagnosis of the *spinipes* group). *Philonthus cinctulus* GRAVENHORST, which is very similar to *P. industanus* has been placed in a separate group because of the conspicuously different aedeagus. However, the species of both groups are treated in one key.

Abbreviations and Acknowledgement

The material treated in this work was made available by the following institutions and private collectors. Their cooperation is kindly appreciated.

- CHP Coll. L. Hromádka, Praha
- CKS Coll. E. Kučera, Soběslav
- CRL Coll. G. de Rougemont, London
- CSO Coll. A. Smetana, Ottawa
- CTL Coll. M. Tronquet, Llimburga
- FMC Field Museum of Natural History, Chicago (A. Newton, P. Parillo)
- HUB Museum der Alexander-Humboldt-Universität, Berlin (M. Uhlig)
- MHNG Muséum d'Histoire naturelle, Genève (I. Löbl)
- MHNP Muséum national d'Histoire naturelle, Paris (N. Berti)
- NHML The Natural History Museum, London (M. Brendell)
- NMP Národní Muzeum, Praha/Kunratice (H. Jelínek)
- NMW Naturhistorisches Museum Wien
- SMNS Staatliches Museum für Naturkunde, Stuttgart (W. Schawaller): Results of the Himalaya Expeditions of J. Martens, no. 222. - For no. 221 see: Senckenbergiana biol. 78/1, 1999. - sponsored by Deutscher Akademischer Austauschdienst and Deutsche Forschungsgemeinschaft



Figs. 1 - 4: 1) *Philonthus industanus*; 2) *P. dentiphallus*; 3, 4) *P. spinipes* - aedeagus, a) ventral view, b) lateral view, c) underside of paramere.

Key to species of the *Philonthus spinipes* and *cinctulus* groups

- 1 Elytra red *P. spinipes*
- Elytra black.....2
- 2 Disc of pronotum with short-meshed, almost isodiametrical microsculpture, medial margins of mandibles with bicuspid (left) or tricuspid (right) tooth..... *P. cinctulus*
- Disc of pronotum with long-meshed, wavy microsculpture, medial margins of both mandibles with simple tooth3
- 3 Eyes large, 1.75 - 2.00 times as long as tempora *P. industanus*
- Eyes smaller, in the unique specimen 1.37 times as long as tempora..... *P. dentiphallus*

The *Philonthus spinipes* group

Philonthus spinipes SHARP, *P. industanus* FAUVEL, *P. dentiphallus* sp.n.

DIAGNOSIS: Moderately large to large species, 11 - 15 mm long; black to dark brown, elytra red or black with slight metallic greenish or brassy reflex; shape of head rectangular or slightly trapezoid, wider than long; tempora and infraorbital portion densely and coarsely punctate and setose, punctural grooves forming infraorbital carina and variably developed temporal carina close to posterior margin of head (the temporal carina is a consequence of the dense and large punctural grooves and is not always distinctly developed, whereas the infraorbital carina is bordering a furrow and is always distinctly developed); eyes markedly longer than tempora; mandibles stout and moderately long in small and medium-sized specimens, or long, slender and slightly angulate in large specimens; medial margins of mandibles with simple tooth; mouthparts simple; pronotum with sides subparallel or slightly rounded, usually with inconspicuous emargination in front of base; margins with numerous dense and long setae, but sparing out middle of anterior and posterior margins; surface with distinct microsculpture of long-meshed, transverse waves; lateral and posterior margins of elytra also with more numerous long setae than usual in *Philonthus* (in *P. spinipes* only posterior margin); scutellum densely punctate; abdominal tergites moderately densely, almost uniformly punctate, iridescent; first three visible tergites with two basal lines, elevated area between basal lines impunctate, only on 3rd visible tergite occasionally with a sparse row of fine punctures close to posterior basal line, but sparing out middle, exceptionally also with a very few scattered punctures on elevated area of 2nd visible tergite; posterior margin of tergite VIII subtruncate; first four segments of front tarsi moderately dilated in both sexes, somewhat wider in males, ventrally bearing modified setae; first three segments approximately of same size, segment four distinctly smaller; subbilobed or bilobed (*P. industanus*), slightly asymmetrical, more extended mediad than laterad; first segment of hind tarsi slightly longer than last segment, about as long as segments 2 - 4 combined.

Male sternite VIII with 3 - 4 large setae, posterior margin deeply emarginate, bearing inconspicuous semi-membranous extension, ground pubescence dense and long; male sternite IX with deeply emarginate apex, bearing two long preapical setae; second gonocoxite of female genital segment with long proximal seta and with minute stylus bearing two long setae.

Aedeagus large (except *P. industanus*) and broad; median lobe with distinct gibbosity at apex of ventral face, in ventral view in shape of two apically fused carinae, in lateral view appearing as large, acute tooth; paramere long or moderately long, peg setae on underside forming two longitudinal rows or are more irregularly arranged (*P. spinipes*).

REMARKS: This group shares many characters with the *politus* s.l. group (*furvus* group sensu SMETANA 1995), especially the shape of the mouthparts and distal abdominal segments, but can be separated by the following character states: eyes conspicuously longer than tempora, presence of infraorbital and temporal carina, dense and long pubescence of infraorbital and temporal

portion of head, margins of pronotum and elytra, more numerous sublateral pronotal punctures, almost impunctate elevated area between two basal lines on first 3 visible tergites and bicarinate gibbosity of median lobe. The monophyly of the group is particularly supported by the last two character states. The group is also represented in the Afrotropical region (e.g. *P. dimidiaticornis* FAUVEL, *P. natalensis* BOHEMAN).

Philonthus spinipes SHARP

Philonthus spinipes SHARP 1874: 39

Kirschenblatia kabardensis BOLOV & KRYZHANOVSKI 1969: 515; TICHOMIROVA 1973; SCHÜLKE & UHLIG 1989.

Kirschenblatia buchari BOHAC 1977: 20; SCHÜLKE & UHLIG 1989.

TYPE MATERIAL: **Lectotype** ♀: "Japan G. Lewis \ Sharp Coll. 1905-313 \ Type (red label) \ *Philonthus spinipes* type D.S. \ Japan (small yellow label) *spinipes* \ Lectotypus *Philonthus spinipes* Sharp, (1874) des. M. Uhlig et M. Schülke 1983" (NHML). **Paralectotypes**: 11 Exs. (for data see SCHÜLKE & UHLIG 1989). - No attempt has been made to see the original material of both *Kirschenblatia* species as they have already been studied by SCHÜLKE & UHLIG (1989).

DESCRIPTION: 12.0 - 14.5 mm long (5.3 - 7.0, abdomen excluded). - Head, pronotum, scutellum and abdomen black, elytra orange-red to brick-red, femora black, hind femora partly yellowish, all tibiae and tarsi yellowish-red, tibial spines dark, outer one or two segments of palpi reddish, antennae black, base of segment 2 reddish, elytra with golden-yellow pubescence, only bases of erect sensorial setae dark or (in Japanese specimens) entire pubescence variably blackened.

Head rectangular or slightly trapezoid, 1.35 - 1.50 times as wide as long; eyes 1.55 - 1.88 times as long as tempora; disc of head impunctate, medial interocular punctures occasionally with accessorial punctures; postero-lateral, temporal and infraorbital portion of head very densely and coarsely punctate; temporal carina weakly or not developed, inconspicuous in lateral view, not confluent with infraorbital carina; antennae short and stout, segments 4 - 6 as wide as long, segments 7 - 10 inconspicuously transverse; pronotum as long as wide or inconspicuously (1.05 times) wider than long, widest in middle, slightly wider than head; sides more distinctly convex than in following species, with inconspicuous emargination in front of base or narrowed toward base in almost straight line; dorsal rows with four punctures, third puncture frequently missing in one or both rows (for variability of pronotal punctation see SCHÜLKE & UHLIG 1989); on antero-lateral portion and margins with numerous punctures bearing very long setae, exceedingly dense along anterior margin, but sparing out middle; elytra along sides slightly longer than pronotum, densely punctate; posterior margin with, lateral faces without additional long setae; punctation of tergites moderately dense, slightly denser than in *P. industanus*; male sternite VIII: Fig. 9; male sternite IX (not figured) not specifically differing from that of *P. industanus*; male tergite X: Fig. 12.

Aedeagus (Figs. 3, 4) very large and robust with long apico-ventral gibbosity, carinae subparallel, slightly concave in middle; paramere (Figs. 3c, 4c) exceedingly variable in shape and in arrangement of peg setae.

DIAGNOSIS: *Philonthus spinipes* superficially resembles *P. nitidus* F., but differs by the species group characters (*P. nitidus*: eyes shorter than tempora, no infraorbital carina, elevated area between two basal lines on first three visible tergites densely punctate) and by the color of the tibiae and tarsi (in *P. nitidus* legs entirely black). The specimens from Japan differ from the mainland specimens by the black color of the elytral pubescence. The extension of the black colour is slightly variable, but is at least conspicuous in the basal half of the hairs. Most likely the mainland populations form a distinct subspecies but this has to be verified by the study of large series from both respective areas. SCHÜLKE & UHLIG (1989) gave a comprehensive account on the variability range of the species and provided a long list of locality data.

ADDITIONAL MATERIAL EXAMINED (East and Southeast Asia):

J A P A N: "Nose Osaka 7.X.1984, K. Ando" (DEI, NMW); "Kawakami Vill. Nagano, 3.IX.1988, K. Ando" (DEI); "Hiller Japan" (CSB).

C H I N A: BEIJING: 4.VI.1989 (NMW); 70 km NE Beijing, Kuangzhuang, 2.VII.1990 (NMW); SHANGHAI: "Umg- Shanghai, Süd-Ost-China" (NMW); SICHUAN: Garze, S env., 31°36'N 100°00'E, 3350 m, 17.VI.1992 (NMW); E Songpan, 3100 - 3300 m, 7.VIII.1994 (CTL); Wudu, 31°41'N 104°23'E, 30.V. - 2.VI.1997 (CKS); Gongga Shan, Moxi, 1300 m, 3.VII.1996 (CSO); GANSU: Yonghai, ca. 20 km SW Yuzhong, 2700 - 2800 m, 9.VIII.1994 (CSO); XINJIANG: "Nordwestl. China, Chinkiang, Col. Reitter" (NMW); YÜNNAN: Lijiang, 26°53'N 100°18'E, 1800 m, 23.VI. - 21.VI.1992 (NMW); FUJIAN: Shaowu, 500 m, 29.X.1937, J. Klapperich (NMW).

S - K O R E A: "Korea, Seoul" (NMW).

R U S S I A (Far East): "Ussuri, Sib.or." (NMW); "Seitengraben des Perwaja Rjetschka \ Tales, nördl. Wladiwostok \ H. Friebe leg. 1918-1920" (NMW); Ussuri region, Novovavrovka, 6. - 10.VII.1989, leg. M. Nikodym (NMB); Primorskiy kray, Arsenev env., 27.V. - 5.VII.1991, leg. O. Šauša (NMW); Primorskiy kray, Kraskino, env. Azayzanovka, 13. - 16.VII.1992, leg. Snížek (NMW).

DISTRIBUTION: The species probably originally occurred in the Far East of Asia. Since the beginning of this century it has obviously extended its distribution range westwards and is now known from the entire Palaearctic region: Japan to West Europe; in the Oriental region occurring only marginally (China, Fujian). It has turned out that *P. spinipes* is a habitat competitor with *P. nitidus* and has gradually displaced it, with the consequence that, especially in Central Europe, *P. nitidus* has become very rare.

Philonthus industanus FAUVEL

Philonthus industanus FAUVEL 1903: 158

Philonthus bipunctatus BERNHAUER 1911: 90 (syn.n.)

Philonthus pubipennis CAMERON 1919: 253 (syn.n.)

Philonthus carbonarius sensu CAMERON 1932: 81

TYPE MATERIAL: *Philonthus industanus*: Lectotype ♂ (present designation): "Nilghiris M. Maindron \ Coonour 15-30 Juill. 1901 1500-2000 m. alt. \ Museum Paris Nilghiri Coonour M. Maundron 1902 \ Type \ *Philonthus industanus* Fvl. Determ. D. Fauvel" (MHNP). - Paralectotypes: According to the original description, there should be additional specimens in the Fauvel collection in Bruxelles (from West Bengal and Sikkim) which I have not studied.

Philonthus bipunctatus: Holotype ♀: "Chitlong Little Nepal Valley Oct. 06 R. Hodgaal \ IND. MUS. \ 3023 16 \ bipunctatus Brh. Typus \ Chicago NHMus M. Bernhauer Collection" (FMC). - Paratype: 1 ♂ ("Cotypus") with almost same data as holotype but numbered "3024 16" (FMC).

Philonthus pubipennis: Holotype ♂ (by monotypy): "Type H.T. [round label] \ Ceylon G. Lewis 1910-320. \ Kitulgalle. 1,700 ft. 17-20.I.82. \ *Philonthus pubipennis* Cam. Type ♂" (NHML).

DESCRIPTION: 11 - 14 mm long (5.6 - 6.1). - Black, elytra occasionally with slight metallic (greenish or brassy) reflex; appendages black, bases and lateral faces of tibiae testaceous.

Head rectangular or slightly trapezoid, 1.27 - 1.40 times as wide as long; eyes 1.75 - 2.00 times as long as tempora; medial interocular punctures widely separated; disc of head impunctate; postero-lateral, temporal and infraorbital portions densely and coarsely punctate, punctures bearing exceedingly long setae; temporal carina not confluent with infraorbital carina; antennae as in *P. spinipes*; pronotum widest in middle, almost as wide as long, slightly wider than head; sides subparallel or slightly rounded, narrowed toward base in almost straight line or inconspicuous concave arc; dorsal rows of punctures very variable; each row usually with two punctures in anterior third, often with a third puncture in posterior half (frequently developed only on one side), rarely with four equidistant punctures, occasionally with additional punctures in between; additionally, posterior margin with pair of large punctures of same size as those of dorsal row, each puncture situated almost exactly on imaginary extension of dorsal row; punctation of antero-lateral portion and margins similar to that of *P. spinipes*; head and pronotum with distinct, transverse, wavy microsculpture; elytra short, along suture shorter than pronotum, along sides as

long as pronotum; surface densely punctate, punctures separated by hardly more than a puncture diameter; lateral faces and hind margins with numerous unusually long setae; scutellum densely punctate and pubescent; abdominal tergites moderately densely, almost uniformly punctate, punctation slightly denser near base of 4th and 5th visible tergites; elevated area between two basal lines on first three visible tergites as in the species group diagnosis; male sternite VIII: Fig. 11; male sternite IX: Fig. 5; male tergite X: Fig. 8; female tergite X: Fig. 7; stylus of tergite IX and gonocoxites of female genital segment: Fig. 10.

Aedeagus (Fig. 1) comparably small, apico-ventral gibbosity short and broad, carinae convex, distinctly protruding laterad; paramere (Fig. 1c) long and slender, peg setae forming almost regular, apically meeting, marginal rows.

ADDITIONAL MATERIAL EXAMINED:

I N D I A: "Madura Ind.or." [not Madura Island, E Java!] (NHML); "Shembaganur Südl. India \ C.E- Tottenham collection. B.M. 1974-587" (NHML); "Dung \ Kalsi 1640. Dehra Dun \ Dr. M. Cameron 1-10-1922 \ M.Cameron Bequest. B.M. 1955-147" (NHML); "Dehra Dun Dr. Cameron. 16-3-1922 \ M.Cameron Bequest. B.M. 1955-147" (NHML); "Simla 7000 ft. Oct. 07 H.M.L. \ Agric. Res. Inst. Pusa \ M.Cameron Bequest. B.M. 1955-147" (NHML); "N.India: Darjeeling. 7000 ft. 11-20.iii.1924. Maj.R.W.G.Hingston. \ Everest Exp. Brit. Mus. 1924-386 \ *Philonthus carbonarius* Gyll." (NHML); "Indes Orient. Trichinopoly, R.P.J. Castets \ Muséum Paris ex. Coll. R. Oberthür" (MHNP).

N E P A L: "Chitlong Nepal \ *Philonthus bipunctatus* \ M.Cameron Bequest. B.M. 1955-147" (NHML); "Chitlong Nepal \ 7169 15 \ bipunctatus Brh. var. dorso 3 punct. \ Halsschild je mit 3 Punkten \ Chicago NHMus M.Bernhauer Collection" (FMC); "under stone Chikalda Berars \ 3664 ft. 23-11-13 N.B. Kinnear \ M.Cameron Bequest. B.M. 1955-147" (NHML); "Nepal: Kali Gandaki-Tal, Dana, Ufer unter Steinen, 1400 m, 26.3.78, Erber leg." (MHNG); "Nepal 435, Mustang Distr., right banks of Lethe Khola near Lethe, 2400 m, 5. - 7.V.1995, Martens & Schawaller" (SMNS); "Nepal, Mustang, Lete. 2550 m, 2.X.83, Smetana & Löbl" (CSO); "Nepal (Prov. Bagmati) below Tarke Ghyang, 2600 m, 25.IV.81, Löbl & Smetana" (CSO); "Nepal (Prov. Bagmati) Kakani, 2200 m, 27.IV.81, Löbl & Smetana" (NMW); "Nepal (Prov. Bagmati) NE Barabhise, 2500 m, 2.V.81, Löbl & Smetana" (CSO, NMW); "Nepal, Khandbari District [Sankhua Sabha] \ For. NE Kuwapani, 2550 m, 13.IV.82, A. & Z. Smetana" (CSO).

S R I L A N K A: "Ceylan \ cinctulus Grav. Wendeler det." (HUB); "Kandy Ceylon" (HUB).

V I E T N A M: "Cho Ra, Tonkin, H. Perrot" (NMW).

C H I N A: "China \ Bowring 63.47*" (NHML); "China-Yunnan, env. Tengchong, 10.-13.6.1993, E. Jendek & O. Sausa leg." (NMW); "Canton, 12.1924 \ Muséum Paris J. Duchaine 1928" (MHNP, NMW); "Macao, 4.XI.08, Süd China \ Field Mus. Nat. Hist. 1966 A. Bierig Colln. Acc. Z-13812" (FMC); "China: B.M. 1980-491 P.M. Hammond \ Guangdong: Guangzhou Baiyunshan 27.IX.80 \ cow dung" (NHML); "Hongkong D.Dudgeon" (NHML).

M A L A Y S I A: "Perak. Malacca. \ *Philonthus industanus* Fvl. \ industanus Fvl. \ Zool. Mus. Berlin" (HUB).

I N D O N E S I A: "I.N.Sumatra, Brastagi, 22-26.5.1991" (NMW).

DISTRIBUTION: Widely distributed in Southeast Asia: India, Nepal, Sri Lanka, Vietnam, China (incl. Hongkong and Macao), Malaysia, Indonesia (N - Sumatra).

Philonthus dentiphallus sp.n.

Philonthus pinensis BERNHAUER (manuscript name)

Holotype ♂: "Museum Paris Kouy-Tchéou Rég. de Pin-Fa Pere Cavallerie 1909 \ Museum Paris don. Paulian \ *Philonthus pinensis* Brnh. Typ. \ pinensis Brnh. Typus *Philonthus* [orange label] \ Chicago NHMus M. Bernhauer Collection" (FMC).

DESCRIPTION: 15 mm long (6.7). - Entirely black, including all appendages - in the single, slightly damaged specimen the following body parts are missing: both antennae except for each basal segment, entire right front leg, tibia and tarsus of right mid leg and tarsus of right hind leg.

Head rectangular, 1.55 times as wide as long; punctation similar to that of *P. industanus*; infraorbital carina confluent with temporal carina; eyes 1.37 times as long as tempora, dorsally distinctly shifted mediad; mandibles long and comparably slender; pronotum 1.06 times as wide as long, as wide as head; right dorsal row with four, left with three (3rd missing) punctures,

punctuation in antero-lateral portion less dense than in *P. industanus*; punctuation of elytra, scutellum and tergites as in *P. industanus*, except for first visible tergite, where punctuation is slightly finer and sparser; microsculpture of head and pronotum as in *P. industanus*.

Aedeagus (Fig. 2) very large, apico-ventral gibbosity with parallel carinae, not protruding laterad; paramere (Fig. 2c) slightly wider and longer than in *P. industanus*, peg setae arranged in more irregular marginal rows, particularly apically.

DISTRIBUTION: Known only from the type locality: China, Guizhou province, Anshun Prefecture, Pingba, ca. 50 km SW Guiyang City.

ETYMOLOGY: The name refers to the dent-like gibbosity of the median lobe.

The *Philonthus cinctulus* group

DIAGNOSIS: The single Asian species of this group shares most characters with the *spinipes* group, but has been separated mainly by the male sexual characters: aedeagus with simple median lobe, without any gibbosities or teeth on ventral face, paramere with irregular apical cluster of peg setae and an additional, transverse row basally. Additionally, medial margin of left mandible with bicuspid tooth, that of right mandible with tricuspid tooth; pronotum with short-meshed, almost isodiametrical microsculpture. Second gonocoxite of female genital segment without long proximal seta, with two distinctly shorter setae situated more distally; furthermore with longitudinal cluster of modified peg-like setae dorso-laterally. This group is also represented in the Afrotropical fauna: *P. hospes* ERICHSON (in *P. hospes* the character of the mandibular dentation is not typically developed and the microsculpture of the pronotum is formed by exceedingly fine microstriae).

Philonthus cinctulus (GRAVENHORST)

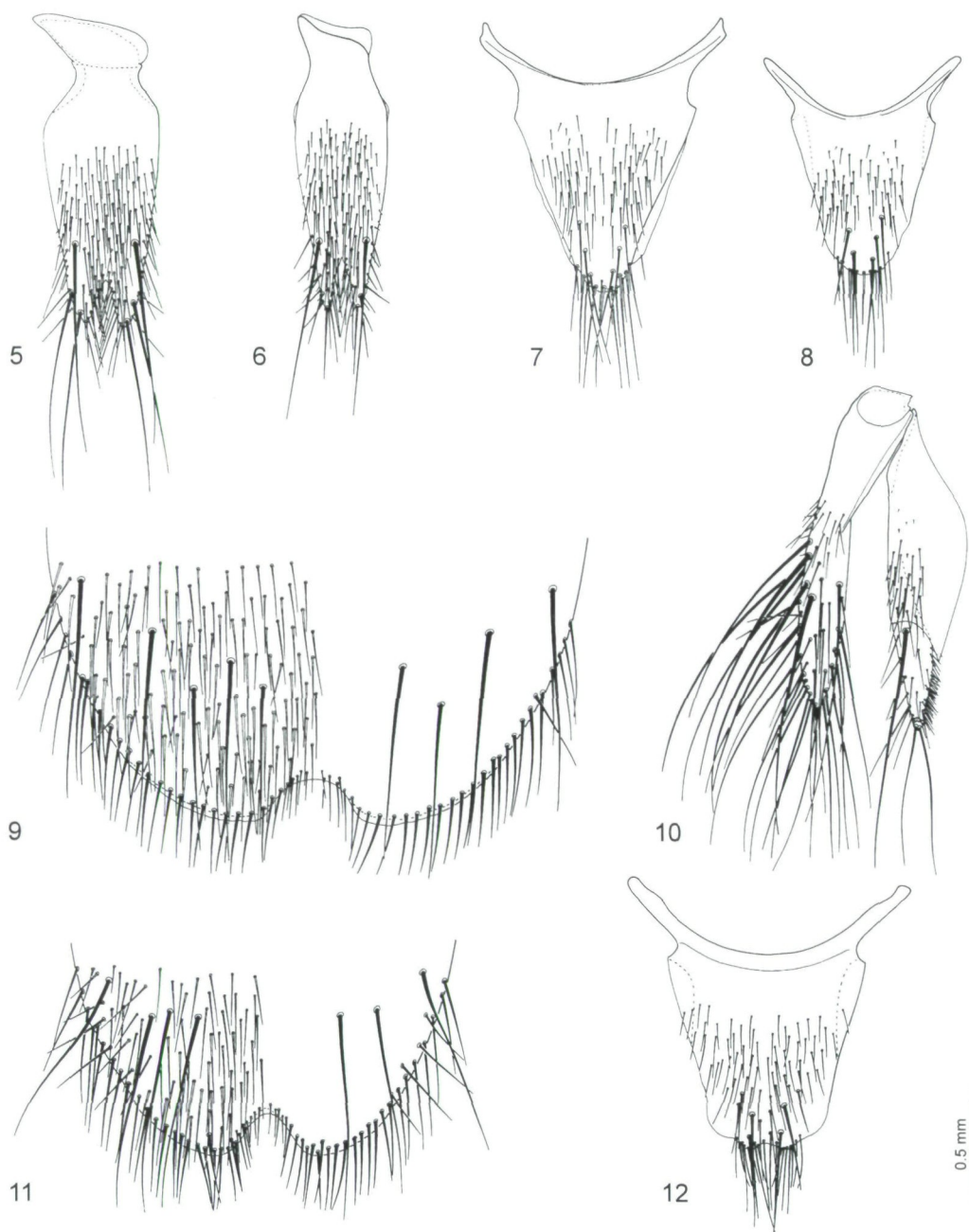
Staphylinus cinctulus GRAVENHORST 1802: 167

TYPE MATERIAL: Holotype ♀ (by monotypy): "6027 \ Type \ cinctulus Gr. Beng. Dald." (HUB).

DESCRIPTION: 10 - 14 mm long (4.7 - 6.6). - Black, elytra usually with metallic greenish or brassy reflex; legs dark reddish testaceous with mid and hind legs variably infusate, lateral faces of hind femora and medial faces of hind tibiae generally infusate; antennae dark reddish testaceous, but basal and middle segments (at distal 2/3 of proximal 3 segments) dark; palpi dark reddish testaceous.

Head subrectangular or moderately trapezoid, 1.30 - 1.35 (♀♀ and small ♂♂) or up to 1.55 (large ♂♂) times as wide as long; eyes 1.9 - 2.4 (♂♂) or 2.75 - 2.85 (♀♀) times as long as tempora, tempora slightly or more distinctly convergent, with variably developed carina, densely and coarsely punctate and pubescent; infraorbital carina well developed.

Pronotum inconspicuously longer than wide (ratio 1.02 - 1.04), subparallel-sided, widest in middle, almost as wide as head; sides slightly emarginate in front of base; dorsal rows with variable number of punctures, usually with 3 punctures in each row, with puncture 3 (counted from anterior margin) two times the distance from puncture 2 than puncture 2 from puncture 1; occasionally with one or more asymmetrically placed accessorial punctures in between (especially between punctures 2 and 3); additionally, posterior margin with a pair of large punctures of same size as those of dorsal row, each puncture situated almost exactly on imaginary extension of dorsal row; on antero-lateral portion and margins with numerous punctures bearing very long setae, exceedingly dense along anterior margin, but sparing out middle (as in *P. industanus*); head and pronotum with very short-meshed, in places (especially on disc of pronotum) even almost isodiametrical microsculpture, head additionally with exceedingly fine micropunctuation.



Figs. 5 - 12: 5) *Philonthus industanus*, ♂ sternite IX; 6) *P. cinctulus*, ♂ sternite IX; 7) *P. industanus*, ♀ tergite X; 8) *P. industanus*, ♂ tergite X; 9) *P. spinipes*, ♂ sternite VIII; 10) *P. industanus*, ♀ stylus of tergite IX and gonocoxites of genital segment; 11) *P. industanus*, ♂ sternite VIII; 12) *P. spinipes*, ♂ tergite X.

Elytra along sides slightly longer than pronotum, densely punctate, punctures separated by 1 - 2 times a puncture diameter; sides, disc and posterior margin with numerous long and erect setae, hairs of ground pubescence long, semi-erect; scutellum densely punctate, pubescence as ground pubescence of elytra.

Abdominal tergites as in the *spinipes* group; shape and setation pattern of sternite VIII and genital segments hardly differing from that of *P. industanus*, but medio-apical emargination of sternite VIII with larger semi-membranous extension. Male sternite VIII: Fig. 19; second gonocoxite of female genital segment (Fig. 18) without long basal seta, with two shorter setae instead, situated more distally; on dorso-lateral face with longitudinal area of modified setae, similar in shape to peg setae of paramere (Fig. 17); male tergite X: Fig. 15; female tergite X: Fig. 16.

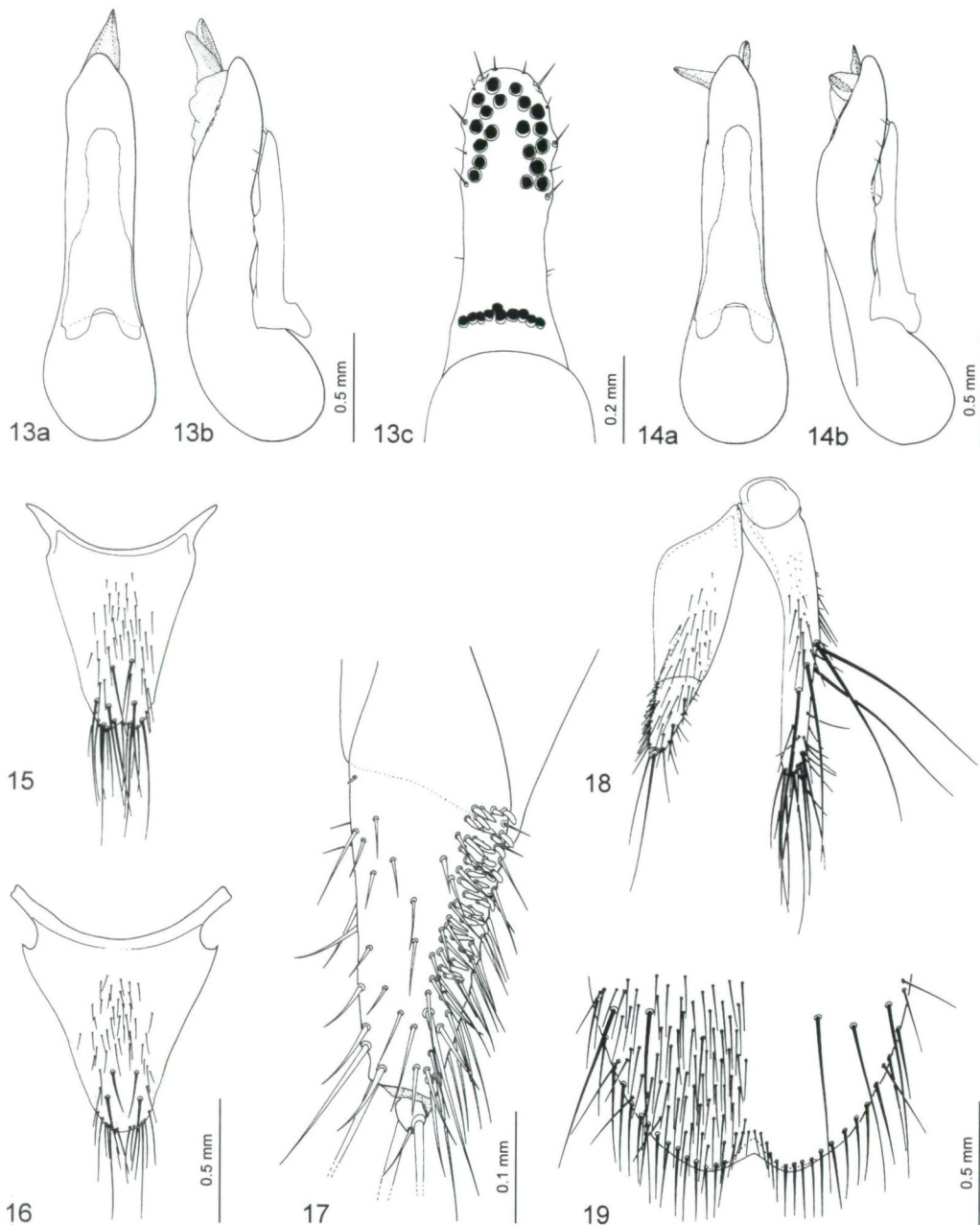
Aedeagus (Figs. 13, 14) rather small, slightly variable; median lobe rod-like, without any gibbositities; paramere (Fig. 13c) entire; underside with subapical cluster of peg setae and additional transverse row of peg setae basally.

DIAGNOSIS: *Philonthus cinctulus* is very similar to *P. industanus*, but can be easily distinguished (in addition to the shape of the aedeagus) by the different microsculpture of the pronotum, the dentation of the medial margin of the mandibles and the generally paler color of the appendages.

REMARK: *Philonthus andrewesi* CAMERON, 1920 (**species propria**), which has been downgraded by CAMERON (1932) to an aberration of *P. cinctulus*, is an entirely different species and does not belong to this species group.

ADDITIONAL MATERIAL EXAMINED:

- P A K I S T A N: "T.R. Bell, Karachi. \ Andrewes Bequest. B.M. 1922-221" (NHML); "West Pakistan, Rawalpindi Umg., 25km NO., 600- \ 700m, 6.-8.XII.55, Chr. Lindemann leg." (NMW); "Pakistan, Rawalpindi, Ayub-Park, 7.-8.IX.1988, Heinz leg." (CSO).
- I N D I A: "Madras" (NMW); "Indien, Ahmednagar \ 27.9.1919 Coll. Köller \ *Philonthus bipunctatus* Bernh." (NMW); "Konain, 7800. Chakrata U.P. \ Dr. Cameron 4.V.21 \ Dr. M. Cameron donavit" (NMW); "Dung \ Dehra Dun. Dr. M. Cameron 11-10-1921 \ M.Cameron. Bequest. B.M. 1955-147." (NMHL); "Dung \ Dehra Dun. Dr. M. Cameron 30-9-1922 \ M.Cameron. Bequest. B.M. 1955-147." (NMHL); "India \ Sharp Coll. 1905-313" (NHML); "24862 \ India Malabar" (NHML); "Berhampur \ Atkinson. Coll. 92-3." (NHML); "India: Madhya Pr. Khajuraho 8.6.1989" [leg. Schuh] (NMW); "India: M.P. Khajurao 9.III.1981 Rougemont" (CRL); "Nedungadu, Tanjore Distr., India orientalis, coll Mus. Pragae" (NMP, CHP, CRL, NMW); "Nedungadu II.98 S.India \ Field Mus. Nat. Hist. 1966, A. Bierig Colln., Acc. Z-13812" (FMC); "S.India, Nedungadu. P.S. Nathan. 1936 \ Muséum Paris, ex Coll. Oberthür" (MHNP); "Inde Anglaise, Rutlam \ Muséum Paris, ex Coll. Oberthür" (MHNP); "Moti-Nala et env. Indes Anglaise (Prov. Centr.) \ G. Babault, Avril 1914 \ Muséum Paris, ex Coll. Oberthür" (MHNP); "Dhanwai Indes Anglaise (Prov. Centr.) \ G. Babault, Avril 1914 \ Muséum Paris, ex Coll. Oberthür" (MHNP); "Kappa Indes Anglaise (Prov. Centr.) \ G. Babault, Avril 1914 \ Muséum Paris, ex Coll. Oberthür" (MHNP); "Lampta Indes Anglaise (Prov. Centr.) \ G. Babault, Avril 1914 \ Muséum Paris, ex Coll. Oberthür" (MHNP); "Central India, Peshmarhi, Sept. 1970, T.R. Nathan leg. \ Field Mus. Nat. Hist., Karl H. Stephen Collection, 1977, Acc. No. Z-15, 639" (FMC); "Süd-Indien, Jan. 1961 \ Coll. H. Korge, Karikal Territory \ ♂ \ *Philonthus bipunctatus* Bernh. Wendeler det." (HUB); "Bengalen \ 21933 [two more specimens with numbers 21934 and 21935]" (HUB); "Tranquebor [sic! The correct spelling of the locality is Tranquebar]" (NMW).
- N E P A L: "Nepal India \ C.E. Tottenham collection. B.M. 1974-587" (NHML); "Nepal, Rapti Tal, Jhawani, 200m \ V.1967, leg. Dierl-Förster-Schacht" (NMW); "Nepal centr. Sauraha, 20.-25.5.1992, leg. Ivo Jenis" (NMW); "Nepal Kalkanda 900m Karnali R. XI.1987 P. Morvan" (CRL); "Nepal Dansur 900m XI.1987 P. Morvan" (CRL); "Nepal Choya 2400-3200m. IX.1987 P. Morvan" (CRL).
- S R I L A N K A: "Ceylon. G. Lewis. 1910-320. \ Galle. On coast level." (NHML); "Ceylon; S.P. Hambantota, T.B.F. 7.Feb.09 \ Ceylon. T.B. Fletcher. 1910-134" (NHML); "Point de Galle \ Sharp. Coll. 1905-313" (NHML); "In cow dung \ Ceylon. Anuradhapura. iX.1958. N.L.H. Krauss. B.M. 1959-11" (NHML); "1164 Ceylon (handwritten on underside of specimen card) \ C.E. Tottenham collection. B.M. 1974-587." (NHML); "Hambantota, Ceylon. IX.'90. H.P.Green 1916-157" (NHML); "Ceylan, Uva, Inginiyagala, 12.II.1970, Mussard, Besuchet & Löbl" (MHNG, NMW); "Ceylan South. Yala 20.VI.76, D. Quillerou" (MHNG); "Ceylon, Nietner" (HUB); "Ceylan" [without further indication] (HUB); "S.Ceylon Tissamaharana II.1978 Rougemont" (CRL).



Figs. 13 - 19: *Philonthus cinctulus*. - 13, 14) aedeagus, a) ventral view, b) lateral view, c) underside of paramere; 15) ♂ tergite X; 16) ♀ tergite X; 17) second gonocoxite of ♀ genital segment (dorsal view); 18) ♀ stylus of tergite IX and genital segment; 19) ♂ sternite VIII.

M Y A N M A R: MANDALAY DIVISION: "Burma, Pagan 3:1:1980 de Rougemont" (CRL); SAGAING DIVISION: "Myanmar: Sagaing Division, Chatthin Wildlife Sanctuary, 23°32'05"N 95°38'53"E, ca. 200m, 5.-17.10.1998, light, leg. Schillhammer (1)" (NMW).

DISTRIBUTION: Widely distributed in the lowlands of South Asia: Pakistan, India, Nepal, Sri Lanka, Myanmar. The species is regularly collected at light.

Zusammenfassung

Im zweiten Teil der Revision der Gattung *Philonthus* STEPHENS, 1829 werden die *spinipes* Gruppe und die *cinctulus* Gruppe behandelt, die zusammen vier Arten umfassen. Eine Art ist neu für die Wissenschaft: *Philonthus dentiphallus* (China: Guizhou). *Philonthus bipunctatus* BERNHAUER, 1911 und *P. pubipennis* CAMERON, 1919 werden mit *P. industanus* FAUVEL, 1903 synonymisiert. *Philonthus cinctulus* ab. *andrewesi* CAMERON, 1920 wird als eigenständige Art rekonstituiert. Die männlichen Genitalien aller Arten und morphologische Details einiger Arten werden abgebildet. In einem Bestimmungsschlüssel werden die Arten beider Gruppen gegenübergestellt.

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Zeitschrift/Journal: [Koleopterologische Rundschau](#)

Jahr/Year: 1999

Band/Volume: [69_1999](#)

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Artikel/Article: [Revision of the East Palaearctic and Oriental species of *Philonthus*, part 2 \(Staphylinidae\). 55-65](#)