

**Revision of the East Palaearctic and Oriental species of  
*Philonthus* STEPHENS part 4.  
The *P. amplitarsis* group and an additional species  
of the *P. cinctulus* group  
(Coleoptera: Staphylinidae, Staphylininae)**

H. SCHILLHAMMER

**Abstract**

The *Philonthus amplitarsis* group (containing one species) and an additional species of the *P. cinctulus* group of the genus *Philonthus* STEPHENS (Coleoptera: Staphylinidae, Staphylininae) are treated. The male genitalia and morphological details of both species are illustrated. A revised key to species of the *P. cinctulus* group is provided.

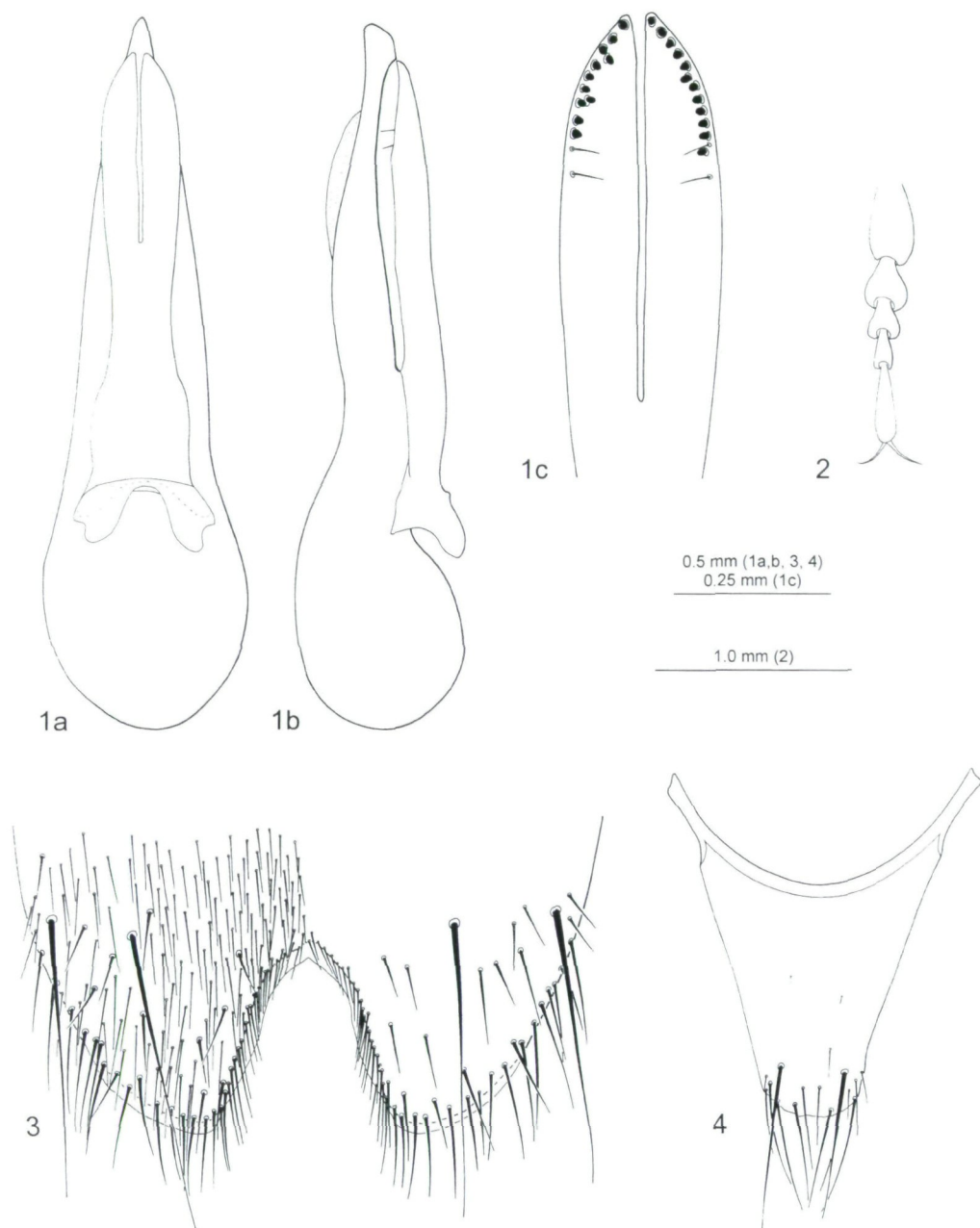
**Key words:** Coleoptera, Staphylinidae, Staphylininae, Staphylinini, Philonthina, *Philonthus*, *amplitarsis* group, *cinctulus* group, new species, systematics, taxonomy, zoogeography.

**Introduction**

In part 2 of the *Philonthus* revision (SCHILLHAMMER 1999) I raised *P. andrewesi* CAMERON to species level (see p. 63, "Remark"), also stating that this species does not belong to the *P. cinctulus* group, probably misled by the unusual shape of the aedeagus. However, a close examination revealed that it indeed belongs to the *P. cinctulus* group. Furthermore, the series of *P. andrewesi* included a specimen, which not only proved to be a new species (*P. amplitarsis* sp.n.), but also made it necessary to establish a separate species group. Due to the external similarity of the new species with the dark-winged species of the *P. spinipes* and *P. cinctulus* groups, it is included in the revised key to the respective species groups. All specimens mentioned in this paper are deposited in the collection of the Natural History Museum, London (NHML).

**The *Philonthus amplitarsis* species group**

The single species of this group shares most characters with the *P. cinctulus* group, but differs notably by the shape of the middle tarsus: segment 1 distinctly thickened, subcylindrical, ventral face densely pubescent, pubescence formed mainly by modified setae similar to those of front tarsus, dorsal face also with numerous setae; segments 2 and 3 dilated, heart-shaped.



Figs. 1 - 4: *Philonthus amplitarsis*; 1) aedeagus - ventral view (a), lateral view (b), paramere (c); 2) middle tarsus; 3) male sternite VIII; 4) male tergite X.

***Philonthus amplitarsis* sp.n.**

**Holotype** ♂: "W.Almora Divn Kumaon U.P. Aug.1917, HGC \ P. cinctulus Gr \ H.G.Champion. Coll. B.M. 1953-156." (NHML).

**DESCRIPTION:** 11.3 mm long (5.5 mm, abdomen excluded). - Black to dark brown, shining, pronotum slightly paler than head, elytra with slight metallic sheen (probably almost faded due to age of specimen), abdominal tergites black, slightly iridescent, posterior margins narrowly, obscurely reddish-brown, antennae reddish-brown, middle segments inconspicuously darkened, labrum and palpi reddish-yellow, mandibles reddish-testaceous, medial margin infusate, legs reddish-testaceous, medial faces of hind tibiae infusate.

Head rounded quadrangular, 1.29 times as wide as long; eyes large, 1.56 times as long as tempora, tempora almost regularly convex; distance between medial interocular punctures more than 3 times distance between medial and lateral interocular punctures; disc of head impunctate, base of head and tempora finely and moderately densely punctate and pubescent (in addition to large setae), area between posterior margin of eye and large temporal seta glabrous; antennae with segments 4 - 7 slightly oblong, segments 8 - 10 about as long as wide; pronotum slightly wider than long (ratio 1.05), wider than head (ratio 1.25), widest in middle, sides almost regularly convex, forming only inconspicuous angle with base; dorsal rows of punctures with 4 (right) and 3 (left) punctures, foremost puncture of left row obviously not developed, second puncture slightly shifted anteriad; head and pronotum with exceedingly dense but very fine microsculpture of transverse waves and meshes; elytra along suture shorter than pronotum, along sides about as long as pronotum, rather densely and coarsely punctate, punctures separated by 1.0 - 1.5 puncture diameters in transverse direction; pubescence long, pale yellowish, becoming shorter and darker toward base of elytra; scutellum finely, moderately densely punctate; abdominal tergites moderately densely, almost uniformly punctate, punctation somewhat finer than on elytra, color of pubescence as on elytra, but becoming darker toward apex of abdomen; surface with exceedingly fine and dense microreticulation of transverse waves causing slight (in fresh material probably strong) iridescence; first four visible tergites with two basal lines, second basal line of 2nd and 3rd visible tergites medially slightly sinuately extended posteriad, elevated area between two basal lines with a few fine punctures on 2nd, with more conspicuous row of fine punctures on 3rd visible tergite.

**Male:** first four segments of front tarsus strongly dilated, subbilobed; middle tarsus: Fig. 2 (see characterization of species group); segments 5 of middle and hind tarsi flattened dorsally; sternite VIII (Fig. 3) with very deep and narrow medio-apical emargination, occupying about half of length of sternite, semi-membranous extension well developed; sternite IX and tergite X (Fig. 4) hardly differing from those of *P. cinctulus* GRAVENHORST.

**Aedeagus** (Fig. 1) very conspicuous; median lobe long with acutely pointed apex, with small but distinct subapical tooth on face adjacent to paramere; paramere (Fig. 1c) long, apical portion slightly dilated, split by very deep and narrow fissure; each lobe with 11 - 12 peg setae apico-laterally and with only two normal setae situated at proximal end of row of peg setae.

**Female unknown.**

**DISTRIBUTION:** The species is at present known only from the type locality in northern India (Uttar Pradesh).

**ETYMOLOGY:** The specific name refers to the modified middle tarsus; *amplus*, -a, -um (Latin) means "wide".

### The *Philonthus cinctulus* species group

As already mentioned in the introduction, I raised *P. andrewesi* to species level but erroneously removed it from the *P. cinctulus* group on account of the deviating aedeagus shape. However, the internal structures of the aedeagus and the modified setae on the second gonocoxite of the female genital segment, as well as the conformity in the remaining secondary sexual characters eventually convinced me of the relationship with *P. cinctulus*. The only characters which do not exactly fit in this group are the lack of the temporal carina and the bifurcate paramere. However, the temporal carina is not an important cranial structure and is usually caused by large confluent punctures. The difference in the paramere (entire versus bifurcate) also occurs in other monophyletic groups (e.g. *P. sanguinolentus* group).

### *Philonthus andrewesi* CAMERON

*Philonthus andrewesi* CAMERON 1920: 214; SCHILLHAMMER 1999: 63.

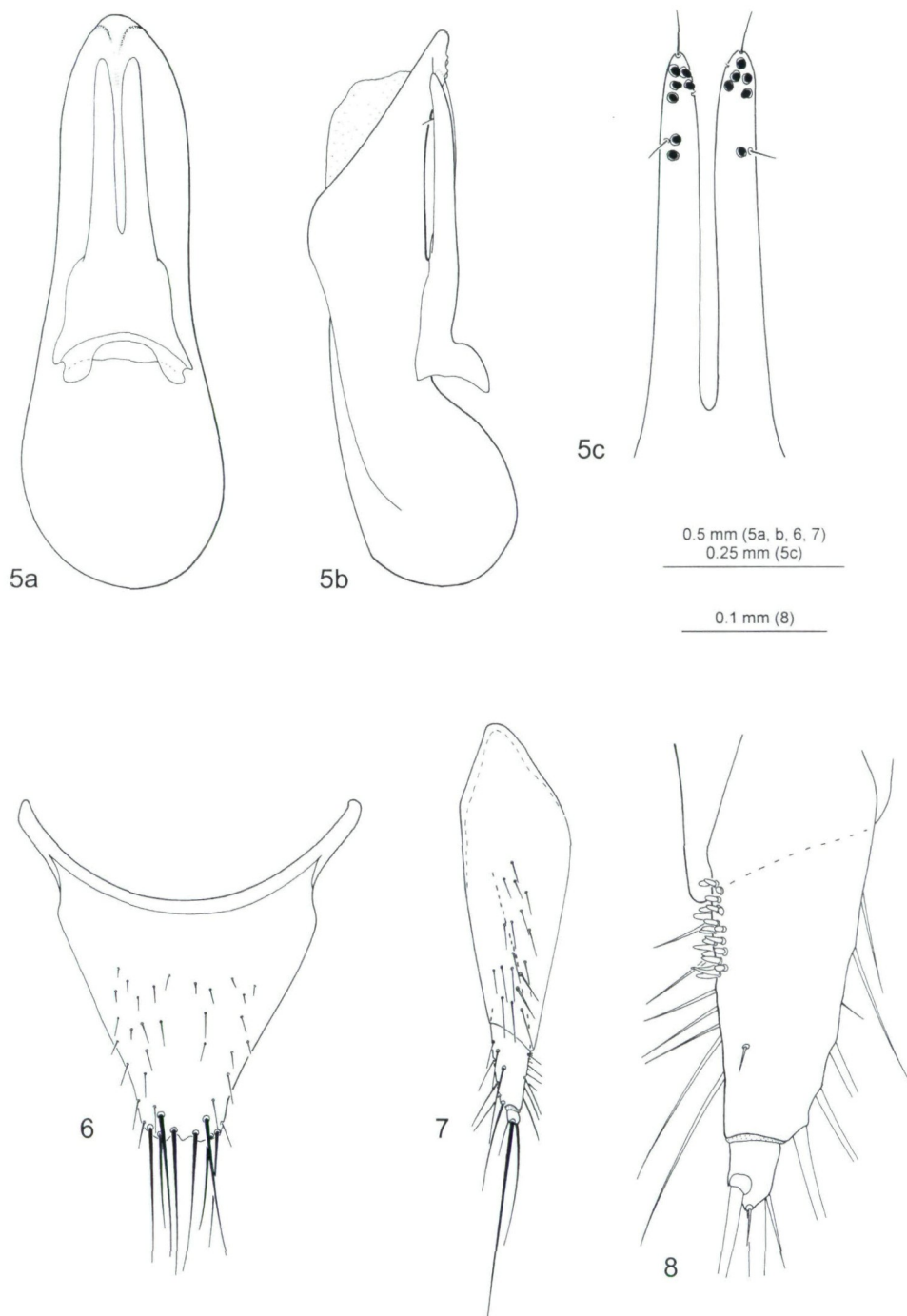
*Philonthus cinctulus* ab. *andrewesi*: CAMERON 1932: 77

TYPE MATERIAL: **Holotype** ♀: "Type H.T. \ H.L.Andrewes Nilgiri Hills \ Andrewesi Cam. \ M.Cameron. Bequest. B.M. 1955-147." (NHML). The specimen is lacking the left antenna and the tibia and tarsus of the left hind leg.

**DESCRIPTION:** 10 - 13 mm long (5.3 - 5.9 mm, abdomen excluded). - Black, shining, pronotum in most cases slightly paler than head and elytra, dark rufo-brunneous, elytra with slight olivaceous-greenish metallic hue, abdominal segments black with posterior margins broadly and distinctly reddish, antennae reddish, 3rd segment frequently darker, palpi and legs reddish, medial faces of middle and hind tibiae infuscate.

Head quadrangular to slightly trapezoid, 2.2 - 2.5 (exceptionally 2.8) times as wide as long; eyes large, 1.68 - 1.72 (exceptionally 1.42) as long as tempora; tempora regularly convex to inconspicuously angulate, without carina, at base densely but finely punctate, coarse punctation behind eyes much less dense than in *P. cinctulus*; distance between medial interocular punctures about 2.5 times distance between medial and lateral interocular punctures; antennae short and stout, segment 4 about as long as wide, subsequent segments hardly decreasing in length, segments 9 and 10 slightly transverse, last segment weakly oblong; pronotum slightly longer than wide (ratio 1.02 - 1.09), slightly wider than head, sides subparallel, weakly convex or slightly conically narrowed anteriorly; dorsal rows each with 4 punctures (in one specimen with 5 punctures); head with very indistinct, often lacking transverse microsculpture, pronotum with distinct microsculpture of narrow and rather short, transverse meshes, meshes becoming shorter medially; elytra rather coarsely and densely punctate, punctures separated by 1 - 2 puncture diameters in transverse direction, pubescence golden-yellow; abdominal tergites coarsely, moderately densely punctate on first two visible tergites, remaining tergites with very dense punctation at base, these punctures separated by less than a puncture diameter; first three visible tergites with two basal lines, punctation of elevated area as in *P. cinctulus*; posterior margin of tergite VIII subtruncate, in females slightly convexly extended medially; male sternite VIII: Fig. 9; female tergite X: Fig. 6; gonocoxites of female genital segment (Figs. 7, 8) medially with numerous peg-like setae.

Aedeagus (Fig. 5) with broad median lobe, ventral face irregularly carinate at apex; paramere (Fig. 5c) deeply bifurcate, each lobe with five subapical peg setae and one or two additional peg setae more basad, distinctly removed from subapical ones; each lobe with only two normal setae, one at apex, another one sublaterally close to more basad situated peg-setae.



Figs. 5 - 8: *Philonthus andrewesi*; 5) aedeagus - ventral view (a), lateral view (b), paramere (c); 6) female tergite X; 7) gonocoxites of female genital segment; 8) second gonocoxite.

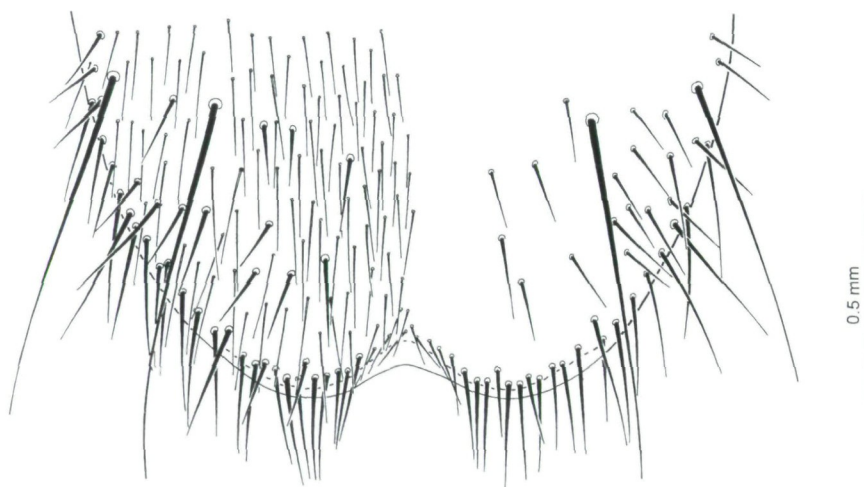


Fig. 9: *Philonthus andrewesi*; male sternite VIII

**DIAGNOSIS:** The species can be easily distinguished from the similar *P. cinctulus* and *P. industanus* FAUVEL by the lack of the temporal carina and by the well delimited reddish posterior margins of the abdominal tergites. It differs from *P. amplitarsis* (in addition to the species group characters) by the shorter antennal segments, the narrower pronotum, the denser punctation on the bases of the tergites and the reddish posterior margins of the tergites.

**ADDITIONAL MATERIAL EXAMINED:**

1 ♂, 3 ♀: "India Malabar \ Fry Coll 1905.100" (NHML). - One specimen bears an additional label: "24861". One specimen is lacking the abdomen.

**DISTRIBUTION:** The species is at present known only from southern India (Tamil Nadu).

**Revised key to species of the *P. spinipes*, *P. cinctulus* and *P. amplitarsis* species groups**

- |   |  |                        |
|---|--|------------------------|
| 1 | Elytra red.....  | <i>P. spinipes</i>     |
| - | Elytra black.....  | 2                      |
| 2 | Temporal carina present; postmandibular ridge long, reaching as far as posterior third of eye length, more or less parallel to margin of eye.....          | 4                      |
| - | Temporal carina lacking; postmandibular ridge short, divergent from margin of eye, not even reaching as far as midlength of eye.....                       | 3                      |
| 3 | Pronotum slightly oblong; antennal segments 4 - 7 as long as wide; posterior margins of abdominal tergites brightly reddish.....                           | <i>P. andrewesi</i>    |
| - | Pronotum wider than long; antennal segments 4 - 7 oblong; posterior margins of abdominal tergites at most obscurely reddish-brown.....                     | <i>P. amplitarsis</i>  |
| 4 | Disc of pronotum with short-meshed, almost isodiametrical microsculpture; medial margins of mandibles with bicuspid (left) or tricuspid (right) tooth..... | <i>P. cinctulus</i>    |
| - | Disc of pronotum with long-meshed, more or less transverse microsculpture; medial margins of both mandibles with simple tooth.....                         | 5                      |
| 5 | Eyes large, 1.75 - 2.00 times as long as tempora.....  | <i>P. industanus</i>   |
| - | Eyes smaller, in the unique specimen 1.37 times as long as tempora.....  | <i>P. dentiphallus</i> |

### Corrigendum

In part 3 of the *Philonthus* revision (SCHILLHAMMER 2000) I erroneously mentioned ZMM (Zoological Museum, Moscou) as depository of the species described by Tikhomirova. In fact, all respective specimens are deposited in the collection of the Zoological Institut, Russian Academy of Sciences, St. Petersburg.

### Zusammenfassung

In Teil 4 der Revision der ostpaläarktischen und orientalischen *Philonthus* STEPHENS werden die *P. amplitarsis*-Gruppe (1 Art) sowie eine weitere Art der *P. cinctulus*-Gruppe behandelt. Die Genitalien und morfologische Details beider Arten werden abgebildet. Ergänzt wird die Studie durch eine korrigierte Version des kombinierten Bestimmungsschlüssels zu den Arten der *P. spinipes*, *P. cinctulus* und *P. amplitarsus*-Gruppen.

### References

- CAMERON, M. 1920: New species of Staphylinidae from India (1). - The Entomologist's Monthly Magazine 56: 214-220.
- CAMERON, M. 1932: The Fauna of British India, including Ceylon and Burma. Coleoptera - Staphylinidae, Vol. III., London: Taylor & Francis, XIII + 443 pp., 4 pl.
- SCHILLHAMMER, H. 1999: Revision of the East Palaearctic and Oriental species of *Philonthus* Stephens Part 2. The *spinipes* and *cinctulus* groups. - Koleopterologische Rundschau 69: 55-65.
- SCHILLHAMMER, H. 2000: Revision of the East Palaearctic and Oriental species of *Philonthus* Stephens Part 3. The *politus* complex. - Koleopterologische Rundschau 70: 113-176.

Dr. Harald SCHILLHAMMER

Naturhistorisches Museum, Burgring 7, A – 1014 Wien, Austria ([heinrich.schoenmann@nhm-wien.ac.at](mailto:heinrich.schoenmann@nhm-wien.ac.at))

# ZOBODAT - [www.zobodat.at](http://www.zobodat.at)

Zoologisch-Botanische Datenbank/Zoological-Botanical Database

Digitale Literatur/Digital Literature

Zeitschrift/Journal: [Koleopterologische Rundschau](#)

Jahr/Year: 2001

Band/Volume: [71\\_2001](#)

Autor(en)/Author(s): Schillhammer Harald

Artikel/Article: [Revision of the East Palaearctic and Oriental species of \*Philonthus\*, part 4 \(Staphylinidae\). 59-65](#)