

Genus	Vol. 2(1): 19–25	Wrocław, 31 V 1991
-------	------------------	--------------------

Studies on Oriental *Cydnidae*. III. On the genus *Peltoxys*
SIGNORET, 1880
(*Heteroptera: Pentatomoidea*)

JERZY A. LIS

Upper Silesian Museum, Department of Natural History,
Pl. Jana III Sobieskiego 2, 41–902 Bytom, Poland

ABSTRACT. Two Oriental species of the genus *Peltoxys* SIGNORET, 1880 (= *Heurnius* DISTANT, 1901, **n. syn.**) are redescribed and figured; a key to their determination is also provided. Besides it, two new synonyms are proposed: *Heurnius erebus* DISTANT, 1901 = *Peltoxys brevipennis* (FABRICIUS, 1798); *Peltoxys blissiformis* HSIAO, 1977 = *Peltoxys typicus* (DISTANT, 1901) **n. comb.**

INTRODUCTION

This is the third contribution to a revision of Oriental *Cydnidae* (LIS, 1990a, b); it concerns the species belonging to the genus *Peltoxys* SIGNORET.

In 1880, SIGNORET described *Peltoxys pubescens* from Saigon, as the genus and species both new to the science (SIGNORET, 1880a). Then the same author (SIGNORET, 1880b) placed *Cimex brevipennis* FABRICIUS, 1798 in the genus *Peltoxys* SIGN. and synonymized *Peltoxys pubescens* SIGNORET, 1880 with *Peltoxys brevipennis* (FABRICIUS, 1798).

In 1977, HSIAO described the second species of the mentioned genus — *P. blissiformis* from South China (HSIAO et al., 1977), and LINNAVUORI (1977) the third species — *P. thaumastellus* from tropical Africa.

HORVATH (1919: 265) indicated similarities in wing structures of four Old World genera: *Garsauria* WALKER, *Nishadana* DISTANT, *Heurnius* DISTANT and *Peltoxys* SIGNORET. *Garsauria* and *Nishadana* could easily be separated from *Peltoxys* by many characters, but *Heurnius* has seemed to me indistinguishable from *Peltoxys*. I have been able to examine the

type-material of two *Heurnius*-species (*H. typicus* DISTANT and *H. erebus* DISTANT); it turned out these species are congeneric with *Peltoxys brevipennis*, and therefore *Heurnius* must be reduced to the junior synonym of *Peltoxys*.

Acknowledgements. I am very indebted to Dr V. RAINERI (Museo Civico di Storia Naturale, Genova, Italy – MCSN), Dr J. VAN STALLE (Institut Royal des Sciences Naturelles de Belgique, Brussels, Belgium – IRSNB), Dr D. PLUOT–SIGWALT (Muséum National d'Histoire Naturelle, Paris, France – MNHN), Dr J. P. DUFFELS (Zoölogisch Museum, Universiteit van Amsterdam, the Netherlands – ZMA) and Dr. U. ASPÖCK (Naturhistorisches Museum Wien, Austria – NhMW) for the loan of specimens.

TAXONOMY

Genus *Peltoxys* SIGNORET, 1880

Peltoxys SIGNORET, 1880a: XXXIII.

Heurnius DISTANT, 1901: 105 (type-species: *Heurnius typicus* DISTANT, 1901; by original designation), **n. syn.**

The genus belongs to the tribe *Cydnini* of the subfamily *Cydninae* and is characterized by the following combination of features:

- body parallel-sided;
- head short, apically truncated;
- clypeus free, broadening apicad, with two apical setae;
- scutellum small, triangular, convex, with apex acute;
- apical margin of corium strongly sinuated;
- membrane large, continued proximally in a V-shaped notch to meet the apex of the medial fracture;
- abdomen with fine yellowish, semierect hair-covering;
- connexiva uncovered.

Type-species: *Cimex brevipennis* FABRICIUS, 1798 (= *Peltoxys pubescens* SIGNORET, 1880a); by automatic fixation.

Distribution: One species in tropical Africa, two species in the Oriental Region.

Key to the Oriental species

1. Body length/width ratio 1,9–2,0; segments of connexivum spined (fig. 4); 2nd antennal segment only 1,1–1,3 times shorter than 3rd; head as in fig. 1; paramere as in fig. 3. *P. brevipennis*
- . Body elongated, length/width ratio 2,2–2,3; segments of connexivum not spined (fig. 8); 2nd antennal segment minute, about 3 times shorter than 3rd; head as in fig. 5; paramere as in fig. 7. . . . *P. typicus*

***Peltoxys brevipennis* (FABRICIUS, 1798)**

(figs 1–4)

Cimex brevipennis [lap.] FABRICIUS, 1798: 536.*Cydnus brevipennis* [lap.]: FABRICIUS, 1803: 187.*Legnotus brevipennis*: SCHIÖDTE, 1847: 464 [emend.]; STÅL, 1868: 8.*Aethus brevipennis*: WALKER, 1867: 158.*Peltoxys pubescens* SIGNORET, 1880a: XXXIV; syn. by SIGNORET, 1880b: CXXXVI.*Peltoxys brevipennis*: SIGNORET, 1880b: CXXXVI, 1881: 655, 1884: 522 [part]; ATKINSON, 1887: 59 [part]; DISTANT, 1902: 106 [part]; LINNAVUORI, 1977: 49; HSIAO et al., 1977: 45. nec *Peltoxys brevipennis*: SIGNORET, 1884: 522 [part]; ATKINSON, 1887: 59 [part]; BERGROTH, 1915: 170.*Heurnius erebus* DISTANT, 1901: 106, 1902: 102, n. syn.

DIAGNOSIS

The species could easily be recognized within the genus by the features given in the key.

DESCRIPTION

Body length 2,8–3,8 mm; body width 1,4–2,0 mm.

Head brownish black or black, short, apically truncated (fig. 1), coarsely and densely punctured, lateral margins of paraclypei slightly reflected upwards, clypeus broadening apicad with two apical short setae; eyes projecting out, brown, ocular index about 2,7–3,3; ocelli grey; antennae brown, 2nd segment almost equal in length to 3rd or only slightly shorter (1,1–1,3 times); rostrum piceous, extending behind mid-coxae.

Pronotum (fig. 4) brownish black or black, densely and coarsely punctured, anterior margin deeply sinuated, posterior one almost straight; lateral margins with a submarginal row of 8–10 setigerous punctures.

Scutellum small (fig. 4), black, distinctly punctured, convex.

Corium short (fig. 4), brown, blackish brown or black, distinctly punctured, with lateral margins parallel. Membrane fuscous, large, narrower than abdomen, continued proximally in V-shaped notch to meet the apex of the medial fracture.

Venter blackish brown, coarsely and densely punctured, with yellowish semierect hair-covering; connexiva with distinct spines (fig. 4). Legs brown, tarsi pale yellowish piceous; a terminal lobe of the scent gland peritreme elongated.

Paramere as in fig. 3, penis as in fig. 2.

TYPE MATERIAL EXAMINED

Lectotype male of *Peltoxys pubescens* SIGNORET (present designation): Saigon, Coll. SIGNORET (white label); *pubescens*, det. SIGNORET (white label); Lectotype, *pubescens* SIGN, labelled by R. C. FROESCHNER 59 (pink label); Coll. Nat.-Mus. Wien (yellowish label); in the collection of NhMW.

Lectotype male of *Heurnius erebus* DISTANT (present designation): Rangoon, Birmania, FEA, VI 1887 (white label); Typus (red label); *erebus* DIST. (in DISTANT's handwriting); *Heurnius erebus* DIST. Typus! (in DISTANT's handwriting); Museo Civico di Genova (white label); in the collection of MCSN.

OTHER MATERIAL EXAMINED

INDIA: S. India, Karikal, Karumbagaram, 2♀ 1♂ VII 1954, Réc. P. S. NATHAN, coll. R. I. Sc. N. B. (IRSNB); VIET-NAM: Long Xuyen, Cochinchine, Dorr., 1♂, Muséum Paris, coll. E. FLEUTIAUX 1919 (MNHN).

DISTRIBUTION

Burma, India, South China, Viet-Nam.

REMARKS

On the basis of descriptions of some specimens from India determined as *P. brevipennis* (SIGNORET, 1884; ATKINSON, 1887; BERGROTH, 1915) I conclude that a part of these records relate to *P. typicus*.

***Peltoxys typicus* (DISTANT, 1901) n. comb.**

(figs 5–8)

Heurnius typicus DISTANT, 1901: 106, 1902: 102.

Peltoxys brevipennis: SIGNORET, 1884, 522 [part]; ATKINSON, 1887: 59 [part]; BERGROTH, 1915: 170.

Peltoxys blissiformis HSIAO, 1977: 46 and 296, n. syn.

DIAGNOSIS

The species is best diagnosed by the features given in the key.

DESCRIPTION

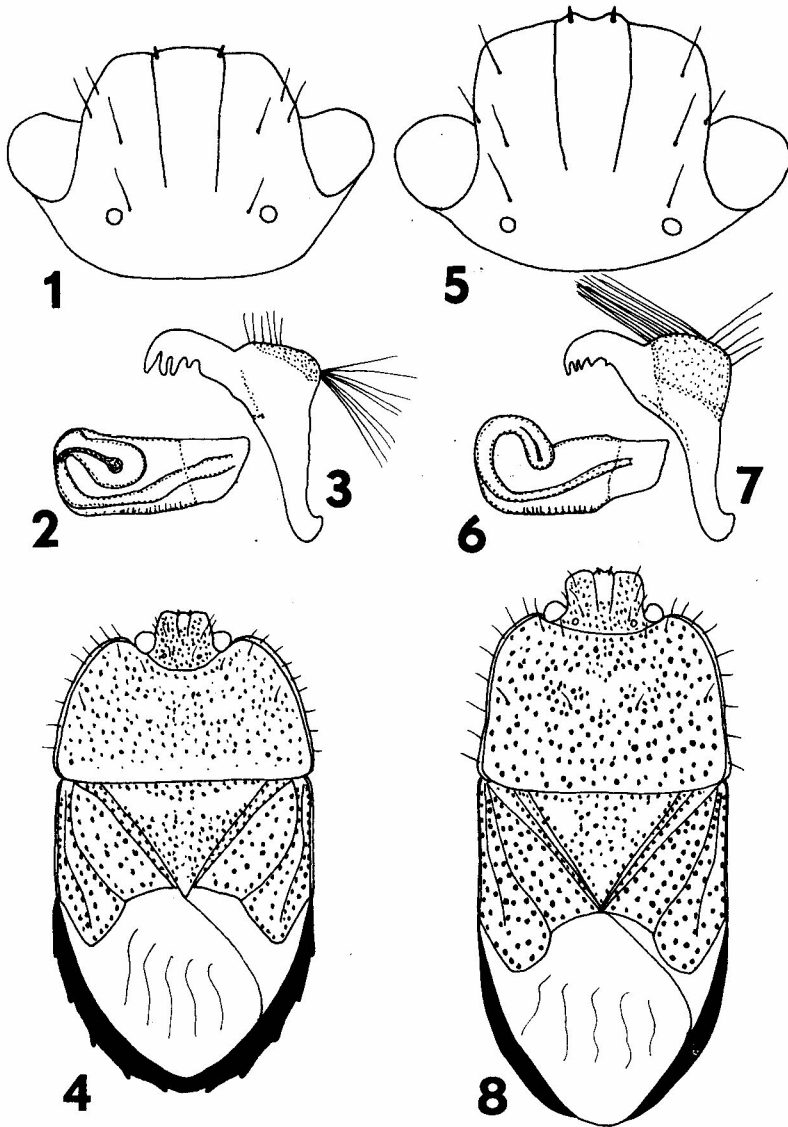
Body length about 3,6 mm, body width about 1,6 mm.

Head short, distinctly punctured (fig. 5), brown, lateral margins of paraclypei blackish brown, clypeus broadening apicad with the apical angles prominent and two apical setae; eyes projecting out, brown, ocular index about 2,9; ocelli light brown; antennae brown, 2nd segment minute, distinctly shorter than 3rd; rostrum pale brown, extending behind fore coxae.

Pronotum (fig. 8) densely and coarsely punctured, anterior part blackish brown, posterior one chocolate brown; anterior margin slightly sinuated, posterior one almost straight; lateral margins with a submarginal row of 8–9 setigerous punctures.

Scutellum small (fig. 8), chocolate brown, with lateral margins blackish brown, densely punctured, convex.

Corium (fig. 8) short, brown, somewhat lighter in shade than scutellum, distinctly punctured; lateral margins parallel. Membrane



1-4. *Peltoxys brevipennis*. 5-8. *Peltoxys typicus*: 1,5 - head, 2,6 - penis, 3,7 - right parmere, ventral aspect 4,8 - general habitus

whitish, narrower than abdomen, large, continued proximally in a V-shaped notch to meet the apex of the medial fracture.

Venter chocolate brown, sides blackish brown, densely punctured and with yellowish semierect hair-covering. Legs brown, tarsi pale brown; a terminal lobe of the scent gland peritreme elongated.

Paramere as in fig. 7, penis as in fig. 6.

TYPE MATERIAL EXAMINED

Lectotype male of *Heurnius typicus* DISTANT (present designation): Carin, Asciiui Ghecú, 1400—1500 m, L. FEA III—IV 88 (white label); Typus (red label); *typicus* DIST. (in DISTANT's handwriting); *Heurnius typicus* DIST. Typus! (orange label); Museo Civico di Genova (white label); in the collection of MCSN.

OTHER MATERIAL EXAMINED

INDIA: South India, Anamalai Hills, Cinchona, 1♀ V 1969, 3500 ft, P. S. NATHAN (ZMA).

DISTRIBUTION

Burma, India, South China (Yunnan).

REMARKS

I have not been able to study the type-material of *Peltoxys blissiformis* HSIAO from Yunnan (my requests for the loan of the material from Institute of Zoology, Academia Sinica, have been ignored); nevertheless, the description, figures and the type-locality given by HSIAO (HSIAO et al., 1977) show that *P. blissiformis* HSIAO, 1977 should be reduced to the junior synonym of *P. typicus* (DISTANT, 1901).

REFERENCES

- ATKINSON, E. T. 1887. Notes on Indian *Rhynchota: Heteroptera*. No 1. J. Asiat. Soc. Beng., 56: 22—61.
- BERGROTH, E. 1915. *Hemiptera* from Bombay Presidency. J. Bomb. nat. Hist. Soc., 24: 170—179.
- DISTANT, W. L. 1901. Enumeration of the *Heteroptera (Rhynchota)* collected by Signor Leonardo Fea in Burma and its vicinity. Trans. ent. Soc. Lond., 1: 99—114.
- . 1902. Fauna of British India, including Ceylon and Burma, *Rhynchota* vol. 1. London: 438 pp.
- FABRICIUS, J. C. 1798. Supplementum Entomologiae Systematicae. Hafniae: 572 pp. + LIII.
- . 1803. Systema Rhyngotorum. Brunsvigae: 335 pp.
- HORVATH, G. 1919. Analecta ad cognitionem Cydnidorum. Anns hist.-nat. Mus. natn. hung., 17: 205—273.
- HSIAO, T., ZHENG, L., REN, S. 1977. A handbook for determination of the Chinese *Hemiptera-Heteroptera*, vol. 1. Nankai Univ., Tientsin: 330 pp.
- LINNAVUORI, R. 1977. *Hemiptera* of the Sudan, with remarks on some species of the

- adjacent countries. 5. *Tingidae*, *Piesmididae*, *Cydnidae*, *Thaumastellidae* and *Plataspidae*. Acta zool. fenn., **147**: 1–81.
- LIS, J. A. 1990a. Studies on the Oriental *Cydnidae*. I. A revision of the genus *Scoparipes* SIGNORET, 1879 (*Heteroptera*). Ann. Upper Siles. Mus., Ent., **1**: 159–192.
- . 1990b. Studies on the Oriental *Cydnidae* (*Heteroptera*). II. Three new genera and species, Bonn. zool. Beitr., **41**: 223–229.
- SCHIÖDTE, J. C. 1847. Om en Gruppe of gravende Cimices. Naturh. Tidsskr., **2** (2): 447–464.
- SIGNORET, M. V. 1880a. [Note]. Anns Soc. ent. Fr., Bull. ent., **5** (10): XXXIII–XXXIV.
- . 1880b. [Note]. Anns Soc. ent. Fr., Bull. ent., **5** (10): CXXXVI.
- . 1881. Revue des Cydnides contenns dans la collection du Musee Civique d'Histoire Naturelle de Genes. Ann. Mus. civ. Stor. nat. Genova, **16**: 621–657.
- . 1884. Révision du groupe de Cydnides de la famille des Pentatomides, 12^e partie 1. Anns Soc. ent. Fr., **6** (3): 517–534.
- STÅL, C. 1868. *Hemiptera* Fabriciana I. K. svenska VetensAkad. Handl., **7**: 1–148.
- WALKER, F. 1867. Catalogue of the specimens of *Hemiptera Heteroptera* in the collection of the British Museum, vol. 1. London: 240 pp.