# Peltoxys sataranus, a new burrower bug species from India, and new records for some other heteropterans from the Maharashtra State\* (Hemiptera: Heteroptera)

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ABSTRACT. *Peltoxys sataranus* n. sp. (Cydnidae: Garsauriinae) from the Maharashtra State (India) is described and illustrated; a key to Oriental species of the genus is provided. *Nishadana umbrosa* Horváth, 1919 (so far known only from Vietnam) is recorded for the first time from India. Moreover, new records for ten other Heteroptera species collected in the Maharashtra State are presented.

Key words: entomology, taxonomy, *Hemiptera*, *Heteroptera*, *Cydnidae*, *Malcidae*, *Tingidae*, *Peltoxys*, new species, key to species, new records, India.

#### TAXONOMY

# Peltoxys sataranus n. sp.

(Fig. 1)

Type material

Holotype male: INDIA: Maharashtra, Satara Distr., Wai, 4 X 2005, catched, leg. L. Borowiec; India Expedition 2005, Dept. of Biodiversity and Evol. Taxonomy, Wrocław University; in the authors' collection at the Department of Biosystematics, University of Opole (Opole, Poland).

ETYMOLOGY

Named after the Satara District where the holotype specimen has been collected.

<sup>\*</sup>Results of the Czech-Polish Expedition to India, Maharashtra, IX-X 2005, no. 1.

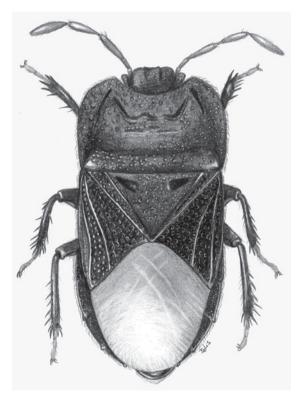
#### Diagnosis

Among the Oriental species of the genus, this new one is similar to *P. typicus* (DISTANT) in its general habitus and the length of antennal segments; however, it can easily be recognized from the latter by its very dense and clearly visible pilosity of the body with hairs longer than a diameter of the eye (in *P. typicus*, the body pilosity is sparse, and hairs are clearly shorter than a diameter of the eye).

#### DESCRIPTION

Body elongate, about 2.1 times longer than wide (length 3.66 mm, width 1.74 mm), black; antennae dark brown with pale brown apices; apices of tibiae, apex of clypeus, eyes, ocelli and posterior parts of clavus and hemelytrae with castaneous tinge; rostrum pale brown; tarsi yellowish brown, distinctly paler than tibiae. Dorsal body surface coarsely punctured and covered with numerous whitish brown very long hairs (usually longer than a diameter of the eye).

Head very densely coarsely punctured; punctures large, bearing well visible whitish brown hairs; pilosity as long as or longer than a diameter of the eye; clypeus free, only a little longer than paraclypei, bearing two strong subapical pegs; paraclypei with 3 submarginal hair-like setae; eyes large, ocular index 3.0; antennae slender, very long,



1. Peltoxys sataranus n. sp., general habitus

5-segmented,  $1^{st}$  segment extending beyond the head margins,  $2^{nd}$  segment minute, about 2.5 times shorter than the  $3^{rd}$ ; the latter equal in length to the  $4^{th}$ ,  $5^{th}$  segment the longest, about 1.5 times longer than the  $4^{th}$ ; rostrum short, reaching middle of mesosternum.

Pronotal disc coarsely punctured and densely pilose with whitish brown very long hairs except for impunctate, smooth and bare elongated areas around the calli and smooth and bare apices of pronotal umbones. Pronotal disc with distinct transverse impression in two thirds of pronotal length, dividing the disc into two lobes; anterior pronotal margin strongly incised, posterior margin almost straight, lateral margins of pronotal anterior lobe with three well visible brown submarginal hair-like setae; anterior convexity of propleuron coarsely punctured and bearing dense and long pilosity in its anterior and median parts, the posterior propleural convexity impunctate, polished and bare.

Scutellar disc, with exception of anterolateral smooth spots, coarsely punctured and densely pilose with whitish brown very long hairs.

Corium evenly coarsely punctured, costal margin with numerous curved short hairs; membrane clearly narrower than abdomen, its apex almost reaching the abdominal tip.

Abdominal sterna coarsely punctured and covered with numerous whitish brown long hairs; anterolateral angles of segments with a clearly visible tubercle each.

Legs not specifically modified.

#### REMARKS

The genus *Peltoxys* Signoret includes four species by now (J.A. Lis 1991, 1994, 1999, 2002), namely two Oriental [*P. brevipennis* (Fabricius) and *P. typicus* (Distant)], and two Afrotropical [*P. thaumastellus* Linnavuori and *P. pilosus* J.A. Lis].

#### KEY TO ORIENTAL SPECIES OF PELTOXYS

- 1. Pilosity of the dorsal body side very dense, hairs very long, longer than the eye diameter ...... sataranus n. sp.

#### NEW RECORDS

#### Cydnidae: Cydninae

# Chilocoris assmuthi Breddin, 1904

1 male: INDIA: Maharashtra, Pune Distr., Lonavla, Bhushi Dam, 25 IX 2005, at light, leg. L. Borowiec; India Expedition 2005, Dept. of Biodiversity and Evol.

Taxonomy, Wrocław University. 1 male: INDIA: Maharashtra, Pune Distr., Mulshi at Mulshi Lake, 7-8 X 2005, at light, leg. L. Borowiec; India Expedition 2005, Dept. of Biodiversity and Evol. Taxonomy, Wrocław University.

Well known Oriental species recorded from India, Laos, Nepal, Pakistan, Sri Lanka, and Thailand (J.A. Lis 1994, 1998, 1999; Hufnagel & Rédei 2005).

## Aethus indicus (Westwood, 1837)

2 males: INDIA: Maharashtra, Pune Distr., Lonavla, Bhushi Dam, 26 IX 2005, at light, leg. L. Borowiec; India Expedition 2005, Dept. of Biodiversity and Evol. Taxonomy, Wrocław University. 1 female: INDIA: Maharashtra, Pune Distr., Mulshi at Mulshi Lake, 7-8 X 2005, at light, leg. L. Borowiec; India Expedition 2005, Dept. of Biodiversity and Evol. Taxonomy, Wrocław University. 1 female: INDIA: Maharashtra, Pune Distr., Mulshi at Mulshi Lake, 10 X 2005, at light, leg. L. Borowiec; India Expedition 2005, Dept. of Biodiversity and Evol. Taxonomy, Wrocław University. 2 females: INDIA: Maharashtra, Satara Distr., Wai, 5 X 2005, at light, leg. L. Borowiec; India Expedition 2005, Dept. of Biodiversity and Evol. Taxonomy, Wrocław University.

Very common species, distributed in the western parts of the Oriental Region (J.A. Lis 1993, 1994, 1999; Hufnagel & Rédei 2005).

# Aethus nepalensis (Westwood, 1837)

1 female: INDIA: Maharashtra, Pune Distr., Lonavla, Bhushi Dam, 12 X 2005, catch., leg. L. Borowiec; India Expedition 2005, Dept. of Biodiversity and Evol. Taxonomy, Wrocław University.

Known from Bangladesh, India, and Nepal (J.A. Lis 1994, 1999).

#### Aethus tanna (DISTANT, 1908)

1 male, 2 females: INDIA: Maharashtra, Pune Distr., Lonavla, Bhushi Dam, 27 IX 2005, catch., leg. L. Borowiec; India Expedition 2005, Dept. of Biodiversity and Evol. Taxonomy, Wrocław University.

Recorded from India, Laos, Myanmar, Nepal, and Thailand (J.A. Lis 1994, 1999).

## Alonips apicalis (Dallas, 1851)

3 males: INDIA: Maharashtra, Pune Distr., Lonavla, Bhushi Dam, 25 IX 2005, at light, leg. L. Borowiec; India Expedition 2005, Dept. of Biodiversity and Evol. Taxonomy, Wrocław University. 2 males, 1 female: INDIA: Maharashtra, Satara Distr., Wai, 5 X 2005, at light, leg. L. Borowiec; India Expedition 2005, Dept. of Biodiversity and Evol. Taxonomy, Wrocław University. 4 males, 9 females: INDIA: Maharashtra, Pune Distr., Mulshi at Mulshi Lake, 7-8 X 2005, at light, leg. L. Borowiec; India Expedition 2005, Dept. of Biodiversity and Evol. Taxonomy, Wrocław University.

Known from Cambodia, India, Myanmar, Pakistan, Singapore, Sri Lanka, and Thailand (J.A. Lis 1994, 1999).

# Fromundus pygmaeus (DALLAS, 1851)

5 males, 3 females: INDIA: Maharashtra, Pune Distr., Mulshi at Mulshi Lake, 7-8 X 2005, at light, leg. L. Borowiec; India Expedition 2005, Dept. of Biodiversity and Evol. Taxonomy, Wrocław University. 2 males, 12 females: INDIA: Maharashtra, Satara Distr., Wai, 5 X 2005, at light, leg. L. Borowiec; India Expedition 2005, Dept. of Biodiversity and Evol. Taxonomy, Wrocław University. 1 female: INDIA: Maharashtra, Pune Distr., Lonavla, Bhushi Dam, 27 IX 2005, catch., leg. L. Borowiec; India Expedition 2005, Dept. of Biodiversity and Evol. Taxonomy, Wrocław University.

Very common species, widely distributed in Oriental and Australian Regions, reaching also southern regions of Palaearctics (J.A. Lis 1994, 1999; Hufnagel & Rédei 2005).

#### Geotomus coimbatoricus J.A. Lis, 1994

1 female: INDIA: Maharashtra, Satara Distr., Wai, 6 X 2005, catched, leg. L. Borowiec; India Expedition 2005, Dept. of Biodiversity and Evol. Taxonomy, Wrocław University.

Known only from India (J.A. Lis 1994, 1999).

# Nishadana typica (DISTANT, 1899)

1 male: INDIA: Maharashtra, Pune Distr., Mulshi at Mulshi Lake, 10 X 2005, at light, leg. L. Borowiec; India Expedition 2005, Dept. of Biodiversity and Evol. Taxonomy, Wrocław University.

Known only from Bangladesh, India, and Myanmar (J.A. Lis 1994, 1999).

#### Nishadana umbrosa Horváth, 1919

6 males, 3 females: INDIA: Maharashtra, Satara Distr., Wai, 4 X 2005 (1 male, 3 females), 5 X 2005 (1 male), 6 X 2005 (4 males), at light, leg. L. Borowiec; India Expedition 2005, Dept. of Biodiversity and Evol. Taxonomy, Wrocław University.

Known only from Vietnam, so far (J.A. Lis 1994, 1999). First record from India.

# Tingidae: Tinginae

#### Teleonemia scrupulosa Stål, 1873

1 male, 2 females: INDIA: Maharashtra, Pune Distr., Mulshi at Mulshi Lake, 11 X 2005, catch., leg. L. Borowiec; India Expedition 2005, Dept. of Biodiversity and Evol. Taxonomy, Wrocław University. 5 males: INDIA: Maharashtra, Satara Distr., Wai,

3 X 2005, catched, leg. L. Borowiec; India Expedition 2005, Dept. of Biodiversity and Evol. Taxonomy, Wrocław University.

Species native to Mexico, West Indies, Central and South Americas; introduced first in the Hawaiian Islands for the "biological control" of the noxious lantana plant *Lantana* sp., and then to many regions of Africa, Asia and Australia (DRAKE & RUHOFF 1965); at present Pantropical species.

#### Malcidae: Malcinae

# Malcus flavidipes STÅL, 1860

1 male: INDIA: Maharashtra, Pune Distr., Mulshi at Mulshi Lake, 11 X 2005, catch., leg. L. Borowiec; India Expedition 2005, Dept. of Biodiversity and Evol. Taxonomy, Wrocław University.

Oriental species; known from China, India, and Sri Lanka to Indonesia and Philippines (Kerzhner 2001).

#### REFERENCES

- Drake, C. J., Ruhoff, F. A., 1965. Lacebugs of the World: a catalog (Hemiptera: Tingidae). Bull. U.S. Natn. Mus., 243: 3-634.
- HUFNAGEL, L., RÉDEI, D., 2005. Cydnidae (Heteroptera) from the Oriental Region and New Guinea. Folia ent. hung., 66: 9-15.
- Kerzhner, I. M., 2001. Family Malcidae Stål, 1860. [in:] Aukema B., Rieger Ch. Catalogue of the Heteroptera of the Palaearctic Region, volume 4, Pentatomomorpha I. The Netherlands Entomological Society, Wageningen, 346 pp.
- Lis, J. A., 1991. Studies on Oriental Cydnidae. III. On the genus *Peltoxys* Signoret, 1880 (Heteroptera: Pentatomoidea). Genus, Wrocław, **2**: 19-25.
- —, 1993. Studies on Oriental Cydnidae. VIII. On *Aethus indicus* (WESTWOOD), *A. philippinensis* DALLAS and *A. pseudindicus* n. sp. (Heteroptera: Pentatomoidea). Genus, Wrocław, 4: 103-111.
- —, 1994. A revision of Oriental burrower bugs (Heteroptera: Cydnidae). Department of Natural History, Upper Silesian Museum, Bytom, 349 pp.
- —, 1998. An annotated checklist of burrower bugs (Cydnidae) of Thailand. Amemboa, 2: 43-46.
- —, 1999. Burrower bugs of the Old World a catalogue (Hemiptera: Heteroptera: Cydnidae). Genus, Wrocław, 10: 165-249.
- —, 2002. *Peltoxys pilosus* n. sp. from the Democratic Republic of Congo, with a key to known species of the genus (Hemiptera: Heteroptera: Cydnidae: Garsauriinae). Genus, Wrocław, **13**: 171-175.