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## NOTE

### NOTES ON *PTILOMERA AGRIODES* (HEMIPTERA: HETEROPTERA: GERRIDAE) FROM EASTERN GHATS, INDIA

J. Deepa, A. Narahari, M. Karuthapandi, S. Jadhav & C. Shiva Shankar

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## Notes on *Ptilomera agriodes* (Hemiptera: Heteroptera: Gerridae) from Eastern Ghats, India

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Freshwater Hemiptera commonly known as aquatic bugs are widely distributed in the aquatic ecosystem. There are 325 species belonging to 84 genera and 18 families reported from India (Basu & Subramanian 2017). The aquatic bug belongs to the suborder Heteroptera (true bugs), in which infra order Gerromorpha are semi-aquatic bugs living on the surface water. Gerromorpha include eight families, viz.: Gerridae, Veliidae, Hydrometridae, Hebridae, Hermatobatidae, Paraphrynoveliidae, Macroveliidae, and Mesoveliidae (Damgaard 2008). Family Gerridae has 26 genera and 93 species in India (Basu & Subramanian 2017), in which genus *Ptilomera* are large water striders distributed in the aquatic habitats. Globally, there are 57 species belonging to the genus *Ptilomera*, in which only six species were documented from India (Jehamalar et al. 2017): *Ptilomera agriodes* Schmidt, 1926; *P. assamensis* Hungerford & Matsuda, 1965; *P. laticaudata* (Hardwicke, 1823); *P. occidentalis* Zettel, 2003; *P. tigrina* Uhler, 1860, and *P. nagalanda* Jehamalar & Chandra, 2017.

Among this *P. agriodes* was originally described from Tiruchirappalli and Tharangambadi, in the state of Tamil Nadu. Later it was reported from Chhattisgarh, Jharkhand, Karnataka, Kerala, Madhya Pradesh,

Maharashtra, Odisha, and Rajasthan by various workers (Thirumalai 2002; Thirumalai et al. 2007; Jehamalar & Chandra 2013; Basu et al. 2015; Jehamalar et al. (2017). Earlier, Basu et al. (2015) reported *P. agriodes* only from Devkund waterfall, Mayurbhanj District, Odisha region of Eastern Ghats. The present study documents *P. agriodes* extended distribution from different parts of Eastern Ghats regions like Andhra Pradesh, Odisha, Telangana and Tamil Nadu.

*P. agriodes* was collected from the different streams of Eastern Ghats (Table 1, Figure 1). The specimens were collected by hand-operated insect-nets and preserved in 10% formalin and labeled. After sorting, the specimens were observed under stereo zoom microscope (Olympus SZX10). The specimens are deposited at the National Zoological Collection, FBRC/ZSI, Hyderabad.

**Material examined:** 16 males, 4 females Exs, FBRC/ZSI/INS/1062, Mallela Theertham waterfall, 20.ix.2018; 3 male, 1 female Exs, FBRC/ZSI/INS/1063, Chinthapaka, Challagadda stream, 10.ix.2018; 8 males, 7 females Exs, FBRC/ZSI/INS/1064, Thatiguda waterfall, 10.ix.2018; 3 males, 1 female Exs, FBRC/ZSI/INS/1065, Dharmattam waterfall, 11.ix.2018; 4 males, 11 females Exs, FBRC/ZSI/INS/1066, Yerravaram waterfall, 03.ix.2018;

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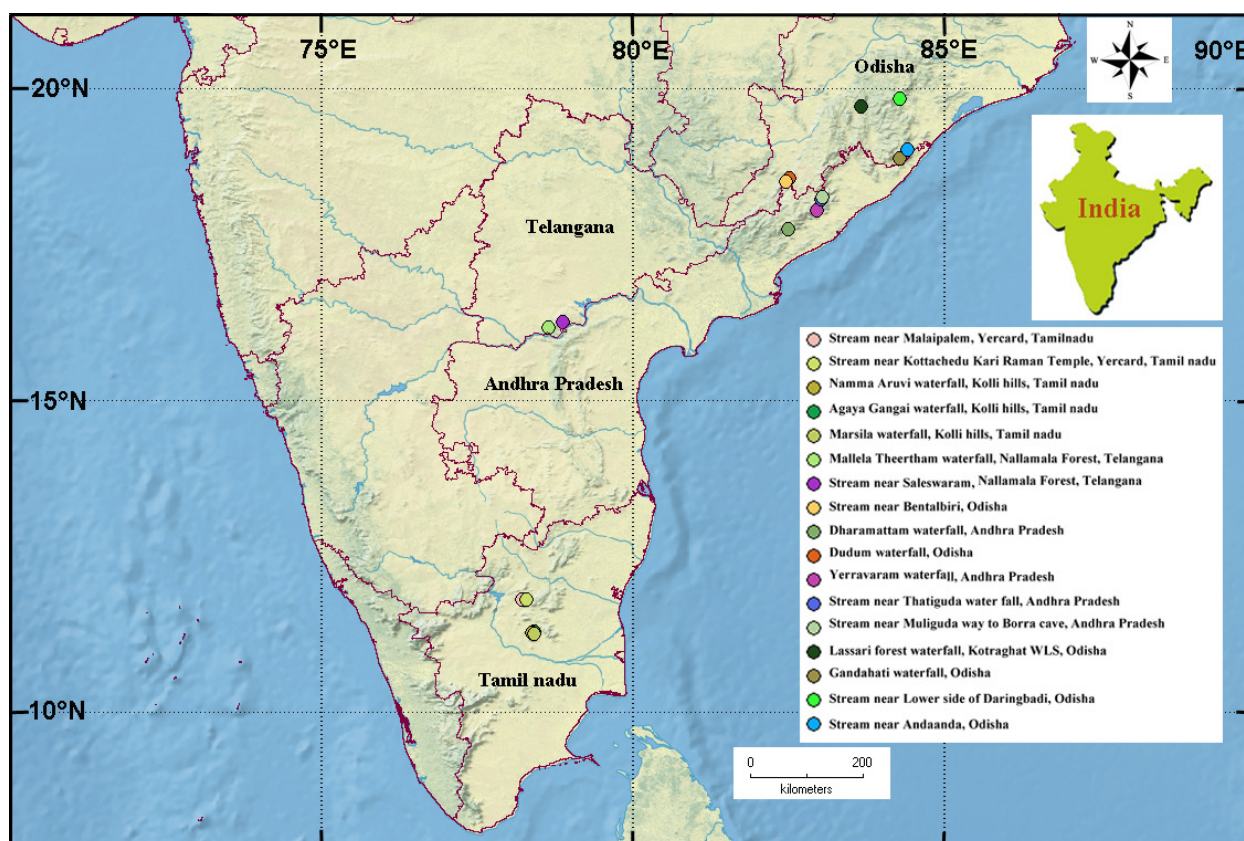


Figure 1. Distribution of *Ptilomera agriodes* from Eastern Ghats, India.

Table 1. Collections location of *Ptilomera agriodes* from different parts of Eastern Ghat regions, India.

	Locations	District	State	Latitude (N)	Longitude (E)
1	Challagadda stream	Vishakhapatnam	Andhra Pradesh	18.054	82.947
2	Stream near Thatiguda waterfall	Vishakhapatnam	Andhra Pradesh	18.226	83.007
3	Stream near Muliguda, way to Borra cave	Vishakhapatnam	Andhra Pradesh	18.263	83.031
4	Dharamattam waterfall	Vishakhapatnam	Andhra Pradesh	17.712	82.478
5	Yerravaram waterfall	Vishakhapatnam	Andhra Pradesh	17.754	82.476
6	Stream near Bentalbiri	Koraput	Odisha	18.568	82.499
7	Dudum waterfall	Koraput	Odisha	18.519	82.454
8	Lassari forest waterfall	Kandhamal	Odisha	19.717	83.656
9	Stream near lower side of Daringbadi	Kandhamal	Odisha	19.849	84.272
10	Gandahati waterfall	Ganjam	Odisha	18.890	84.270
11	Stream near Andaanda	Ganjam	Odisha	19.031	84.388
12	Marsila waterfall	Nammakal	Tamil Nadu	11.308	78.394
13	Stream near Malaipalem	Salem	Tamil Nadu	11.822	78.214
14	Namma Aruvi waterfall	Nammakal	Tamil Nadu	11.289	78.365
15	Agaya Gangai waterfall	Nammkal	Tamil Nadu	11.267	78.395
16	Stream near Kottachedu, Kari Raman Temple	Salem	Tamil Nadu	11.831	78.272
17	Mallela Theertham waterfall, Nallamala Forest	Mahabubnagar	Telangana	16.266	78.856
18	Saleswaram	Mahabubnagar	Telangana	16.189	78.639



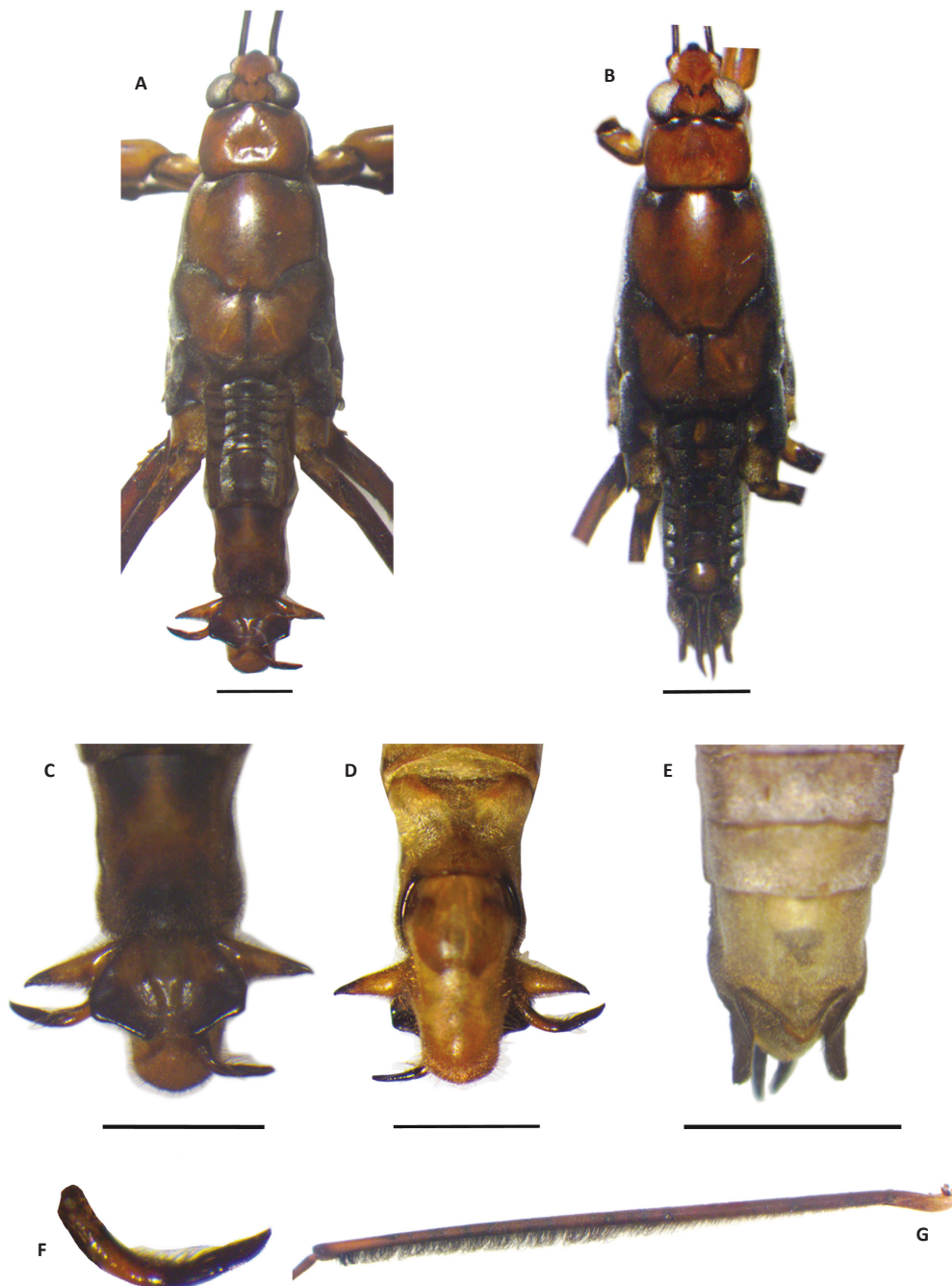


Image 1 . *Ptilomera agriodes* (Schmidt, 1926): A—male | B—female | C—male abdominal dorsal view | D—male abdominal ventral view | E—female abdominal ventral view | F—paramere | G—male femur | Scale = 1mm. © A. Narahari.

13males, 8females Exs, FBRC/ZSI/INS/1067, Stream at Saraiguda, way to Borra caves, 05.ix.2018; 8 males, 4 females Exs, FBRC/ZSI/INS/1132, Marsila waterfall, 06.i.2019; 3 males, 10 females Exs, FBRC/ZSI/INS/1133, Malai Palem waterfall, 08.i.2019; 3 males, 2 females Exs, FBRC/ZSI/INS/1318, Saleswaram, 28.xii.2018; 4 males, 2 females Exs, FBRC/ZSI/INS/1407, Namma Aruvi waterfall, 06.i.2019; 6 males, 8 females Exs, FBRC/ZSI/

INS/1413, Agaya Gangai waterfall, 6.i.2019; 9 males, 5 females Exs, FBRC/ZSI/INS/1540, Near Nagalru waterfall, 08.i.2019; 39 males, 35 females Exs, FBRC/ZSI/INS/1132, Kottachedu Kari Raman Temple, 07.i.2019; 1 male Exs, FBRC/ZSI/INS/1687, Gandahati waterfall, 25.xi.2019; 4 males, 4 females Exs, FBRC/ZSI/INS/1714, Stream near Bentalbiri, 29.xii.2019; 2 males, 1 female Exs, FBRC/ZSI/INS/1711, Dudum waterfall, 29.xii.2019; 1 male, 6

females Exs, FBRC/ZSI/INS/1712, Lassari forest waterfall, 03.i.2020; 3 males, 6 females Exs, FBRC/ZSI/INS/1709, Stream near Kasipatnam, 27.xii.2019; 1 male Exs, FBRC/ZSI/INS/1710, Stream near Daringbadi, 04.i.2020; 4 males, 13 females Exs, FBRC/ZSI/INS/1707, Stream near Andaanda, 05.i.2020.

**Diagnostic features:** Body length of the male is 13–14 mm; Female 11–12 mm. Surface of the body is dark brown to yellow brown in color. Eyes are large reddish-brown to black and broadly rounded. First antennal segment is larger than combining length 2–4. Rostrum is short, male mid femur fringe of black setae. Length of male abdomen 6mm, paramere curved and contains setae. Hind legs are longer than body length; spine-like lateral process of the pygophore extended well the lateral process of the proctiger. The posteromedian margin of the proctiger is bisinuate.

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## Erratum

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Table 1. line Stud Book #40 last box in row reads: N. Schaffer	Should read: N. Schaffer
P. Kretzschmar	T. Hildebrandt



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