

Rec. zool. Surv. India: 112(Part-1): 127-128, 2012

Short Communication

FIRST RECORD OF *DEIPHOBE INCISA* WERNER, 1933 (INSECTA: MANTODEA) FROM JHARKHAND, INDIA AND MORPHOLOGY OF MALE GENITALIA

INTRODUCTION

In continuation of the recent compilation on the mantid fauna of old Bihar (present Bihar and Jharkhand states) (Sureshan & Sambath, in press), the present paper deals with the discovery of the species *Deiphobe incisa* Werner for the first time from Jharkhand, India. The genus *Deiphobe* Stal, 1877 belongs to the tribe Miomantini of subfamily Mantinae and family Mantidae. Seven *Deiphobe* species are known to occur in India out which one species *D. infuscata* (Saussure, 1871) is reported from Jharkhand and Bihar (Mukherjee *et al.*, 1995). According to Ehrmann (2002) the genus *Deiphobe*

is classified under the tribe Rivetinini of subfamily Miomantinae of family Mantidae. *D. incisa* is so far reported from Madhya Pradesh, Maharashtra, Punjab, Rajasthan and Uttar Pradesh in India and also from Myanmar and Nepal and the species is reported here for the first time the state of Jhakhand. *D. incisa* differs from *D. infuscata* in having supra anal plate little trapezoid and incised, metazona longer than fore coxa, fore femora internally yellowish brown with a black spot on claw groove and another blackish band on femoral brush. In *D. infuscata* supra anal plate incised feebly, metazona shorter than fore coxa and fore femora without



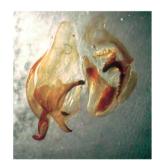
1. body dorsal view;



3. head front view;



2. head and part of prozona dorsal view;



4. male genitalia dorsal view.

Fig. 1. Deiphobe incisa Werner, male Supra anal plate

128 Rec. zool. Surv. India

black spot on claw groove. The morphology of the male genitalia of *D. incisa* is also described here, studies of which is always important for the better understanding of very closely related species in taxonomic studies.

Deiphobe incisa Werner

1933. Deiphobe incisa Werner, Proc. Zool. Soc. London. 900.

General morphology: (Photo. 1) General colour brown. Head (Photo. 2, 3) blackish brown, frontal sclerite with blackish patches in centre and sides, narrow, upper margin straight. Eyes round, brown, ocelli pinkish brown, vertex almost blackish. Pronotum slender, with a median faint black line; margins of prozona denticulate, that of metazona smooth; disc of prontoum with scattered faint granules; median carina of prozona weakly indicated, that of metazona indicated only in the base and apex; metazona with a distinct black band ventrally near coxal joint. Fore coxae denticulate, internally with faint blackish bands near base, internal apical lobes divergent; femora externally with faint blackish longitudinal patches, internally pale yellowish brown with faint blackish line on disc on upper margin; external spines black at tips only, 4 in number; internal spines 14, discoidal spines 4, all spines black at tips only; claw groove with a black spot, femoral brush with blackish band, tibia with 13 internal spines and 8 external spines all black at tips only.

Forewing with costal area yellowish green, opaque, discoidal area brown, slightly greenish above, semi opaque, anal fold blackish; anal area with five veins; stigma colorless. Hind wing basal area colorless, discoidal area violet black with whitish transverse veinules, with a round whitish spot distally; Supra anal plate (Fig. 1) little trapezoid, incised, carinate dorsally, strongly in

the basal half and weakly in the distal half; cerci cylindrical.

Male genitalia (in dorsal view) (photo 4) Titillator (TI) shows 90° bend towards left with no coiling and tip blunt. Phalloid apophysis (PA) slightly bend towards right, chitinization of upper margin with minute teeth. The right plate (RP) bears a strong chitinization that is bend on the left and it tip is directed posteriorly., the basal part of the chitinization bears irregular row of strong teeth. The posterior end of hypophallus (H) bears a very sharp knife like lobe with an additional small sharp tooth basally and whole margin of the knife end bears minute teeth. The anterior end has a strong chitinous structure with is blunt at tip.

Measurements (in mm): Male: Total length 83 (from anterior end of head to tip of abdomen); prozona 7.5; metazona 16, Fore coxa 14, femur 18, tibia 7, tarsus 10, forewing 53.

Material examined: 1 Male, India: Jharkhand, East Singbhum dist., Dalma Wild life sanctuary, Pindrabera, N 22°57′620″E 86°11′783″19.iii.2009, coll. S.Sambath. (Reg.No. A.1337) (deposited in Zoological Survey of India, Gangetic Plains Regional Centre, Patna, Bihar).

Distribution: India: Madhya Pradesh, Maharashtra, Punjab, Rajasthan, Uttar Pradesh, Jharkhand (current study).

ACKNOWLEDGEMENTS

We are grateful to the, Director, Zoological Survey of India, Kolkata for providing facilities and encouragement. First author is also grateful Dr. H.V. Ghate, Professor, Modern College, Pune, and Dr.T. Mukherejee, Presidency College, Kolkatta for offering various sorts of helps in his studies on Indian Mantodea and encouragement.

REFERENCES

Ehrmanm, R. 2002. *Mantodea : Gottesanbeterinnen der Welt*. Naturund Tier-Veriag GombH (NTV), Munster, Germany, 519 pp. (in German).

Mukherjee, T.K., Hazra, A.K. & A.K. Ghosh, 1995. The mantid fauna of India (Insecta: Mantodea). *Oriental Insects*, **29**: 185-358.

Sureshan, P.M. & S. Sambath (in press) Mantid (Insecta: Mantodea) fauna of old Bihar (Bihar and Jharkhand) with some new records from the state. (*Records zool. Surv. India*)

P. M. SURESHAN AND S. SAMBATH

Zoological Survey of India, Gangetic Plains Regional Centre, Rajendra Nagar, Patna, Bihar. 800 016, India. Email: samanyu2003@yahoo.com