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NOTE

FIRST REPORT OF THE ASSASSIN BUG *EPIDAUUS WANGI* (HETEROPTERA: REDUVIIDAE: HARPACTORINAE) FROM INDIA

Swapnil S. Boyane & Hemant V. Ghatge

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First report of the assassin bug *Epidaus wangi* (Heteroptera: Reduviidae: Harpactorinae) from India

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A single female assassin bug, collected in Arunachal Pradesh, was identified as belonging to the genus *Epidaus* Stål, 1859, based on the key given by Distant (1904), but it did not match with any species described by him. The family Reduviidae that includes predatory bugs, is one of the largest and most diverse group among Heteroptera (Schuh & Slater 1995). The genus *Epidaus* Stål, 1859 occurs mainly in the Oriental region and has more than 25 described species (Maldonado-Capriles 1990; Chen et al. 2016). In the checklist of Reduviidae of India, Ambrose (2006) included five species under *Epidaus*, namely: *E. alternus* Bergroth, 1915, *E. conspersus* Stål, 1863, *E. atrispinus* Distant, 1904, *E. bicolor* Distant, 1903, and *E. famulus* (Stål, 1863). Most of these species are, however, distributed in northeastern India, except *E. bicolor*, which is from Malabar region. A brief diagnosis of four of the above, except *E. alternus*, was given by Distant (1904); *Epidaus parvus* Distant, 1904, described from Burma (=Myanmar) was excluded. Later, a search of the literature revealed that the species collected in Arunachal Pradesh is, in fact, *Epidaus wangi* Chen et al., 2016 described recently from Tibet, China

(Chen et al. 2016).

Since this is a recently described species, we are giving only diagnostic characters of the genus and the species, along with many illustrations.

A single collected female (Arunachal Pradesh, leg. Gaurang Gowande, July 2019) was preserved in 70% ethanol, subsequently dried and mounted for study. It was studied under Leica stereozoom MZ6 microscope and photographed with attached Canon PowerShot S50 camera. Several photographs were stacked using CombineZP software and stacked images were processed using Adobe Photoshop CS5. Measurements were done with Erma stage and ocular micrometer and an accurate scale. All measurements are in millimeters (mm).

Heteroptera, Reduviidae, Harpactorinae

Genus *Epidaus* Stål, 1859

Diagnostic characters (mainly following Distant 1904): Body elongate; head slightly shorter than pronotum, with a distinct spine at base of antennal insertion; postocular region longer than anteocular; first visible labial segment shorter or subequal to second

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and third segments combined; posterior pronotal lobe with a pair of discal erect spines or tubercles; lateral or humeral angles of pronotum with a sharp spine and a smaller tooth-like spine or a tubercle just behind; fore femora slightly incrassate than mid and hind femora.

***Epidaus wangi* Chen, Zhu, Wang & Cai, 2016.**
(Images 1 A–E)

Diagnostic characters: Coloration—Body yellow brown, subshining, with a pattern of black stripes and spots. Eyes black; ocelli brownish; first antennal segment with three broad black annulations, second antennal segment with basal and apical black annulations, third and fourth segments entirely yellow brown, without annulations. Pronotum dorsally with following black markings or portions: anterior angles, base of discal tubercles, and laterally on each side just behind transverse sulcus; lateral and discal spines. Black markings of legs include complete and incomplete black annulations on femora and tibia. As shown in images 1A–B, fore femora have one complete annulation beyond middle or in distal half while mid- and hind-femora possess one complete annulation beyond middle and an incomplete annulation before middle; all tibia possess three black annulations – one basal, one before middle, and one apical. Extreme margin of some connexival segments indistinctly brownish. On ventral side, the black markings are at lateral (pleural) margin of prosternum and a spot near base of meso and metacoxae on outer side (Image 1B).

General structural characters—Head: a prominent spine at the base of antennae; eyes globular; ocelli distinct situated on a tubercle (Image 1C); labium as shown in Image 1D; pronotum with lateral and discal spines (Image 1C); female terminalia as shown in Image 1E.

Chen et al. (2016) have provided several colour illustrations and also line drawings of male and female genitalia of *E. wangi*. The abdomen is broadened at some segments in our specimen, as originally described for female of this species; the female terminalia, the size, and other body measurements of our specimen are also matching with the original description. Chen et al. (2016) have also discussed the similarity/dissimilarity of this species with other Oriental species. The other species of *Epidaus* in India are distinctly different in coloration and so are unlikely to be confused with this species. *Epidaus bachmaensis* Truong, Zhao & Cai, 2006 and *Epidaus insularis* Zhang, Zhao, Cao & Cai, 2010, described recently from Vietnam and China, respectively, are very different species.

Thus the specimen examined here matches perfectly with figures and the detailed description given by Chen et al. (2016). As it is not so far recorded from India, we are reporting it for the first time from the Indian territory taking the total of *Epidaus* species known from India to six. It is true that the occurrence of this species in India is not surprising as the type locality of the species is in the adjacent region and we do share many other species with that region in China.

Measurements (in mm): Total length 25.0, Head length including neck 4.2; head breadth between eyes 1.0; head breadth at eyes 1.87, eye diameter 0.75; anteocular 1.70, postocular including neck 1.75; antenna: first segment 9.0, second segment 3.75, third segment 5.75, fourth segment 2.60; labium: first segment 2.50, second segment 1.75, third segment 0.75; pronotum length along midline 5.0; width at humeral angle spine 8.1; width at anterior angles of pronotum 2.0; distance between discal spines 2.0; scutellum length 1.75; scutellum breadth at base 2.0; legs: forefemur 8.5, foretibia 8.0, foretarsus with claw 1.5; mid femur 7.0, mid tibia 6.5, tarsus with claw 1.5; hind femur 9.0, hind tibia 11.0, hind tarsus with claw 1.50; hemelytra 16.00; hemelytra passing abdomen by 3.0; maximum width of abdomen 8.3.

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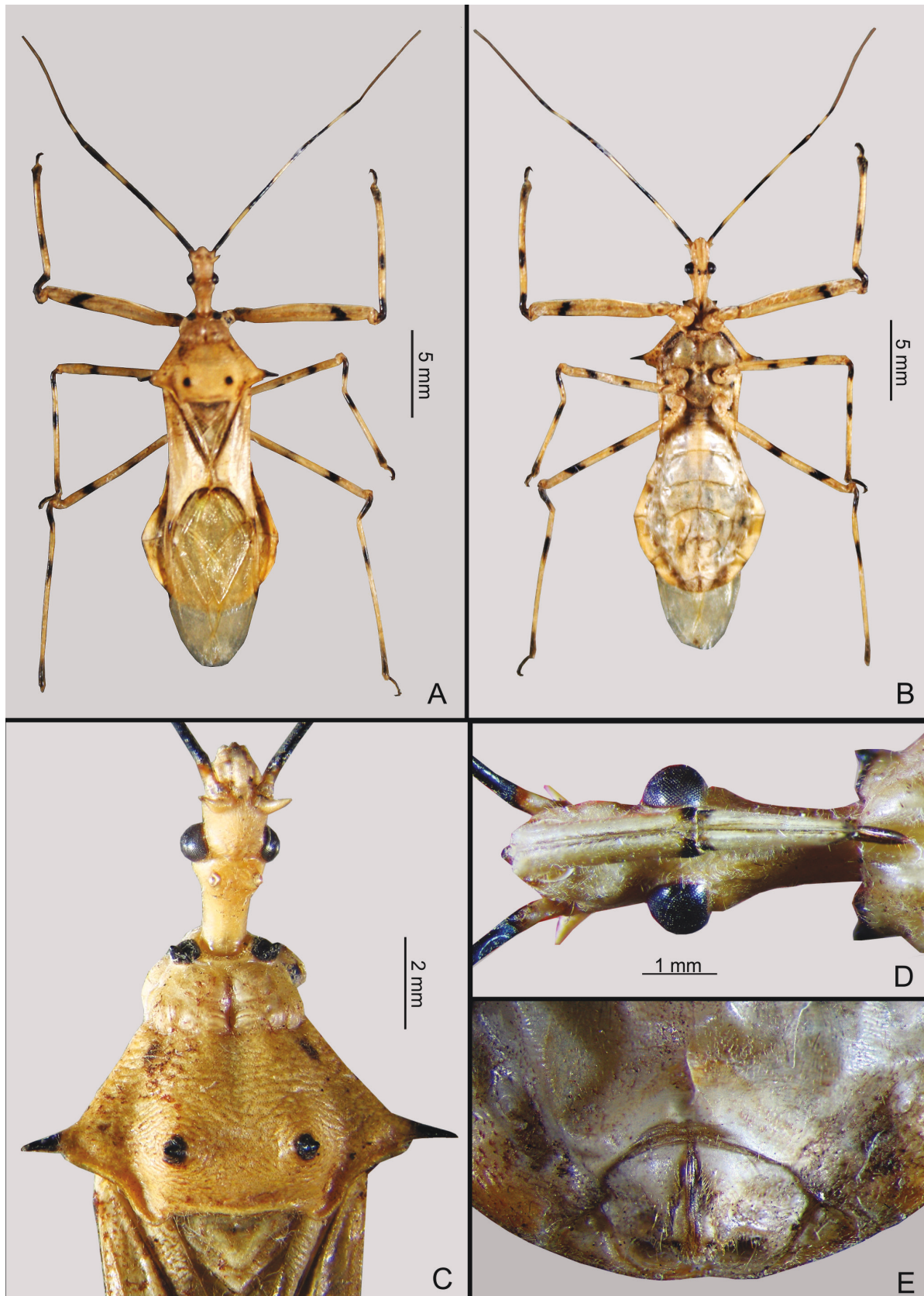


Image 1. *Epidaus wangi* Chen et al., 2016: A—dorsal view | B—ventral view | C—head and pronotum, dorsal view | D—head, ventral view, including labium | E—female terminalia, ventral view. © Hemant V. Ghatge.



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