

**A NEWLY RECORDED GENUS *EVARCHA* SIMON, 1902  
(ARANEAE: SALTICIDAE) FROM INDIA**

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**ABSTRACT:** Genus *Evarcha* Simon with its species *E. flavocinta* (C. L. Koch, 1846) is recorded for the first time from India. They are diagnosed, described and illustrated here in.

**KEY WORDS:** *Evarcha flavocinta*, first record, India, Araneae, Salticidae.

Salticidae is the largest family of the order Araneae. Till date members of this family compose 7.84% species of the world araneofauna (Metzner, 2013; Platnick, 2013). In India they are represented by a total of 207 species under 73 genera (Keswani et al., 2012). During our survey for the spiders of tea ecosystem of Dooars and its adjoining reserve forests, we sampled *Evarcha flavocinta* (C. L. Koch, 1846) from Kailashpur tea estate, Nepuchapur tea estate and Jaldapara Wild Life Sanctuary. Search of literature reveals that the genus *Evarcha* Simon with its species is the first record from India. The recorded species is described and illustrated in the interest of Indian Arachnology. Diagnosis of the newly recorded genus is also provided.

### **MATERIAL AND METHODS**

Material were mainly collected by visual search and hand picking from the tea bushes and litter of the tea estates and its adjoining reserve forests of Dooars respectively. Collected samples were preserved following Tikader (1987) and studied under Stereo Zoom Binocular Microscopes, model Olympus SZX-7 and Zeiss SV-11. The measurements indicated in the text are in millimeters (mm), made with an eye piece graticule. Leg measurements are shown as: total length (femur, patella, tibia, metatarsus, tarsus). Material are in the deposition of Entomology Laboratory, Department of Zoology, University of Calcutta, Kolkata.

Abbreviations used: AL= abdominal length, ALE= anterior lateral eye, AME= anterior median eye, AW= abdominal width, CL= cephalothoracic length, CW= cephalothoracic width, PLE= posterior lateral eye, PME= posterior median eye, TL= total length.

### **TAXONOMIC ACCOUNT**

#### **Genus *Evarcha* Simon**

*Evarcha* Simon, 1902, *Ann. Soc. Ent. Fr.*, 71: 389-421.

**Type species:** *Araneus falcatus* Clerck, 1757.

**Diagnosis:** Medium-size salticids. Cephalothorax light yellow to brown, swollen but weakly wider, with horn like tuft of long, stiff, slightly curved bristles on the lateral sides of anterolateral eyes. Ocular quad broader than long, usually darker. Clypeus vertical and narrow, often covered with white scales. Chelicerae with 1 promarginal and 2 retromarginal teeth. Epigyne with a transverse chitinous plate and 2 pockets in front of it, receptacles strongly sclerotised, multi-chambered. Embolus usually short, sometimes with compound terminal apophysis.

**Distribution:** Throughout except Neotropical (Proszynski, 2009; Haddad and Wesolowska, 2011; Metzner, 2013; Platnick, 2013).

***Evarcha flavocinta*** (C. L. Koch)

(Figs. 1-5 & 6)

*Maevia flavocinta* C. L. Koch, 1846, *Die Arachniden*: 74.

*Evarcha flavocinta* (C. L. Koch) Zabka, 1985, *Annls. Zool. Warsz.*, 39: 224.

**Description:** Female

CL - 3.43, CW - 2.46, AL - 3.43, AW - 2.09, TL - 7.06. Cephalothorax (Fig. 1) brown, longer than wide, elongate oval, clothed with brown hairs, cephalic region somewhat flat, transversely rectangular with ocular area brown black, sides vertical, thoracic region posteriorly depressed with distinct, medium, brown longitudinal fovea, radii faintly marked. Eyes 8, homogenous, transparent, basally ringed with black, arranged in 3 transverse rows, anterior row recurved as viewed dorsally, ocular quad trapezoid, a little wider behind, formed by posteromedian (PME) and posterolateral (PLE) eyes, anteromedians (AME) largest, anterolaterals (ALE) nearly  $1/3^{\text{rd}}$  of AME,  $2^{\text{nd}}$  row of eyes or PME smallest, both PME and PLE set on the slope of a single tubercle, PME slightly inward to the lateral margin of ocular quad, situated almost at the centre of ALE and PLE, PLE = ALE, set on tubercles, eye diameter  $\text{AME} > \text{ALE} \geq \text{PLE} > \text{PME}$ . Interocular distance:  $\text{AME} - \text{AME} = 0.71$ ,  $\text{ALE} - \text{AME} = 0.60$ ,  $\text{ALE} - \text{ALE} = 1.74$ ,  $\text{PME} - \text{PME} = 1.77$ ,  $\text{PLE} - \text{PME} = 0.49$ ,  $\text{PLE} - \text{PLE} = 1.83$ ,  $\text{ALE} - \text{PLE} = 1.09$ ,  $\text{AME} - \text{PME} = 1.06$ . Clypeus narrow, margined with white, long hairs. Chelicerae (Fig. 2) moderately long, brown, more or less parallel, promargin with 2 and retromargin with 1 teeth, fang dark brown, curved, sharp, stout and stumpy. Labium (Fig. 3) brown, longer than wide, constricted sub-basally, apically truncate and scopulate. Maxillae (Fig. 3) brown, longer than wide, anteriorly bulged, pale yellowish, scopulate with dark brown hairs, both outer and inner margins concave. Sternum (Fig. 3) yellow brown, rebordered, longer than wide, clothed with long, sub marginal and fine, brown hairs, outer margins dark, slightly indented at each coxae, apical margins nearly straight, tip rounded. Legs moderately long, stout, yellow brown, clothed with hairs and spines, tarsal claws 2 with claw tufts, each with 4 pectination, femora I with 3-0-2(2) - 0, femora II with 3-0-2(2) - 2, femora III with 3-0-3(2-1) - 1, femora IV with 3-0-1 - 1, tibia I with 0-6(2-2-2)-2-0, tibia II with 0-5(2-2-1)-2-0 and tibia III-IV with 0-3(2-1)- 3-3 spination. Leg measurements: I 5.57 (1.71, 1.00, 1.29, 0.93, 0.64); II 5.00 (1.71, 0.79, 1.00, 0.93, 0.57); III 5.57 (2.00, 1.00, 1.14, 0.86, 0.57); IV 6.07 (2.07, 1.07, 1.36, 0.93, 0.64). Leg formula 41=32.

Abdomen (Fig. 1) hirsute, brown, anteriorly truncate, posteriorly narrowing, apical margins with long, erect, brown hairs. Dorsum decorated with 2 pairs of indistinct sigillae in anterior half, one pair of semilunar black patch posteriorly, ventral pale with black, median marking.

**Epigynum - Internal genitalia** (Figs. 4 & 5): Spermatheca tubular, fertilization duct short, downwardly directed, copulatory duct lateral, highly coiled.

**Material examined:** 2 females, Jaldapara Wild Life Sanctuary, Jalpaiguri, West Bengal, India, 12. iv. 2009, coll. D.C. Dhali; 1 female, Nepuchapur T. E., Jalpaiguri, West Bengal, India, 12. x. 2009, coll. T. K. Roy.; 1 female, Kailashpur T. E., Jalpaiguri, West Bengal, India, 24. viii. 2010, coll. T. K. Roy.

**Distribution:** India (New record): West Bengal; Bintan Island, China, Indonesia, Japan, Lombok, Malaysia, Singapore, Vietnam (Prószyński, 2007; Metzner, 2013; Platnick, 2013).

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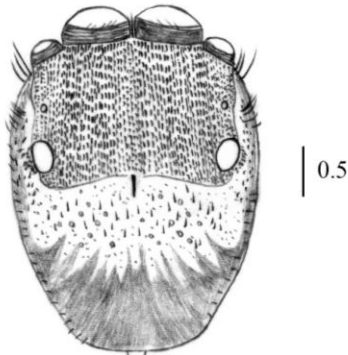


Fig. 1



Fig. 2

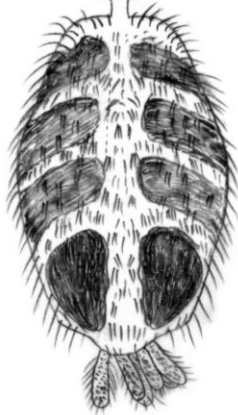


Fig. 3

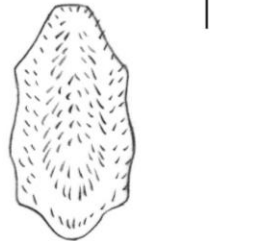


Fig. 5

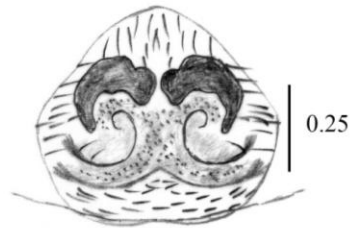


Fig. 4

Figure 1-5. *Evarecha flavocincta* (C. L. Koch, 1846); 1. Cephalothorax and abdomen, dorsal view; 2. Chelicerae, ventral view; 3. Maxillae, labium and sternum, ventral view, 4. Epigynum, ventral view, 5. Internal genitalia, dorsal view.



Fig. 6

Figure 6. *Evarcha flavocincta* (C. L. Koch, 1846), General habitus.