



## Short Communication

### A NEW RECORD OF *FABAEFORMISCANDONA SUBACUTA* (YANG, 1982) (CRUSTACEA: OSTRACODA: CANDONIDAE) FROM INDIA

Globally, 55 species of ostracods belonging to the genus *Fabaeformiscandona* were documented (Martens and Savatzenalinton, 2011). The taxonomy and global distribution of the species *Fabaeformiscandona subacuta* (Yang, 1982) was reviewed by Escriva *et al.*, (2012). It was originally described by Yang (Hou *et al.*, 1982) as *Candona subacuta* Yang, 1982 from fossil of Neogene sediment (Jiangsu province) in China. According to Escriva *et al.*, (2012) *F. subacuta* was recorded from China, Japan, Korea, Thailand, Australia and Colombia. This has disjunction distribution, widespread in Eastern Asia, and also found in South America and Iberian Peninsula. The copulatory behaviour and sexual morphology of *Fabaeformiscandona* was well documented by Smith and Kamiya, 2007. It is hypothesized that *F. subacuta* is an invasive species in the Iberian Peninsula. Earlier there was no recorded of this species from Indian Peninsula, through globally it has been recorded from 78 locations. Interestingly, while studying the ostracods of Andhra Pradesh, first time the authors have recorded *F. subacuta* from Deccan plateau of Indian subcontinent and also a first record of its distribution from South Asia, might be a 79<sup>th</sup> locality on the globe (Fig. 1).

Plankton samples were collected during 2013-14 from two different freshwater habitats *viz.* Osmansagar reservoir (17°21'57" N & 78°18'14"

E), Ranaga Reddy district and Manjeera dam (17°23'14" N & 78°18'34" E), Medak District, Telangana State, India (Fig. 1). The samples were collected from the littoral region by using plankton net and preserved with 4% neutralized formalin solution. While analysing Ostracod specimens, some were identified as *Fabaeformiscandona subacuta*. A sorted male and female specimen were placed on different clean glass slides contain in 1:1 ratio of glycerine and water for dissection under stereo binocular microscope (Olympus SZ10X). The dissected animal parts were shielded with DPX mount. The camera lucida drawings were made under light microscope (Carlzeiss). All the specimens were deposited with the National Zoological Collections of Freshwater Biology Regional Centre, Zoological Survey of India, Hyderabad.

#### SYSTEMATIC ACCOUNT

Class OSTRACODA

Subclass PRODOCOPA

Order PDOCOPIDA

Suborder CYPRIDOCOPINA

Super family CANDONINAE

Family CANDONIDAE

*Fabaeformiscandona subacuta* (Yang, 1982)

1982. *Candona subacuta* Yang (In Hou *et al.*), Geological Publishing House, Pekin, China.

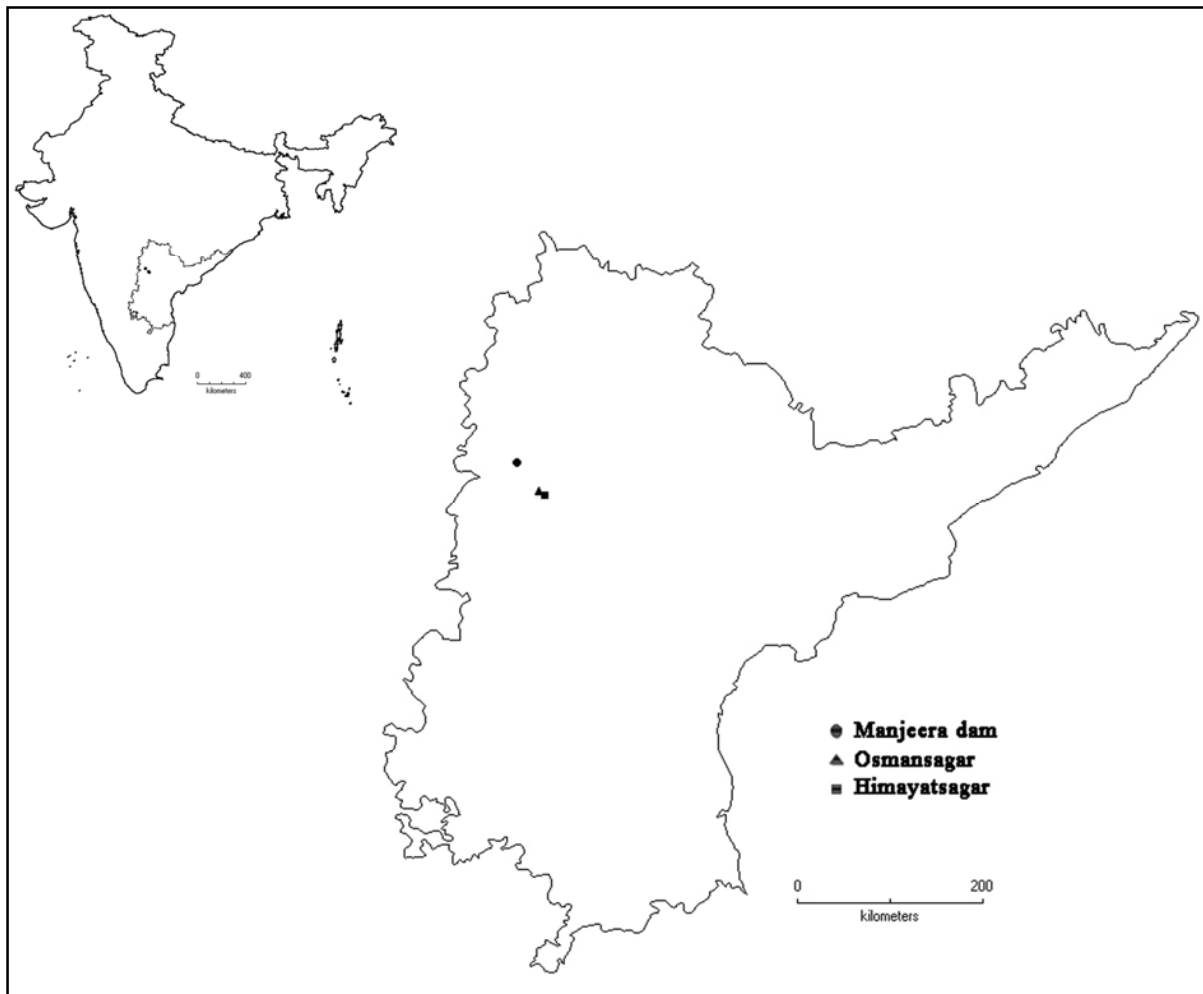


Fig. 1. Distribution of *Fabaeformiscandona subacuta* from Telangana, India.

*Material examined:* 05 exs., Osmansagar, 18.05.2013, Reg. No: FBRC/ZSI/N: 953; 1ex., Manjeera dam, 23.03.2014, Reg. No: FBRC/ZSI/N: 1027; 01ex., Himayatsagar, 05.08.2014, Reg. No: FBRC/ZSI/N: 1028.

*Morphological features:* Carapace in female elongated, length 0.9mm and width 0.45mm (Fig. 3A), dorsal margin straight sloping towards anterior, ventral concave in the medially, posterior and anterior margins are round. The maximum height in mid-posterior. Posterior ventral margin inner crescent layer slightly concave. In male, anterior and posterior margins are round, posterior broader than anterior, maximum height in the posterior dorso-ventrally, ventral medially concave (Fig. 2A). Antennula seven segmented

(Fig. 2B&3B). Natatory setae are absent in antenna (Fig. 3C). In Male, Y aesthetasc slender and long,  $t_2$ ,  $t_3$  setae are thick with round end on the fourth segment,  $t_2$  longer than  $t_3$  (Fig. 3C). Mandibula coxal plate elongated, median is broad (Fig. 3E). Terminal segment of second thoracopoda with long distal claw  $h_2$  and two setae,  $h_1$  longer than  $h_3$  (Fig. 3F). Uropodal ramus slightly curved, symmetrical, posterior and anterior setae are present (Fig. 2F). Hemipenis large, elongated and wide,  $a$  lobe has a shallow ridge,  $m$  processor elongated terminated with  $h$  lobe (Fig. 2D&E). Female reproductive organ anteriorly round.

*Distribution:* India: Telangana. Elsewhere: Japan, S. Korea, Australia, Russia, Spain, Thailand, New Zealand, Colombia.

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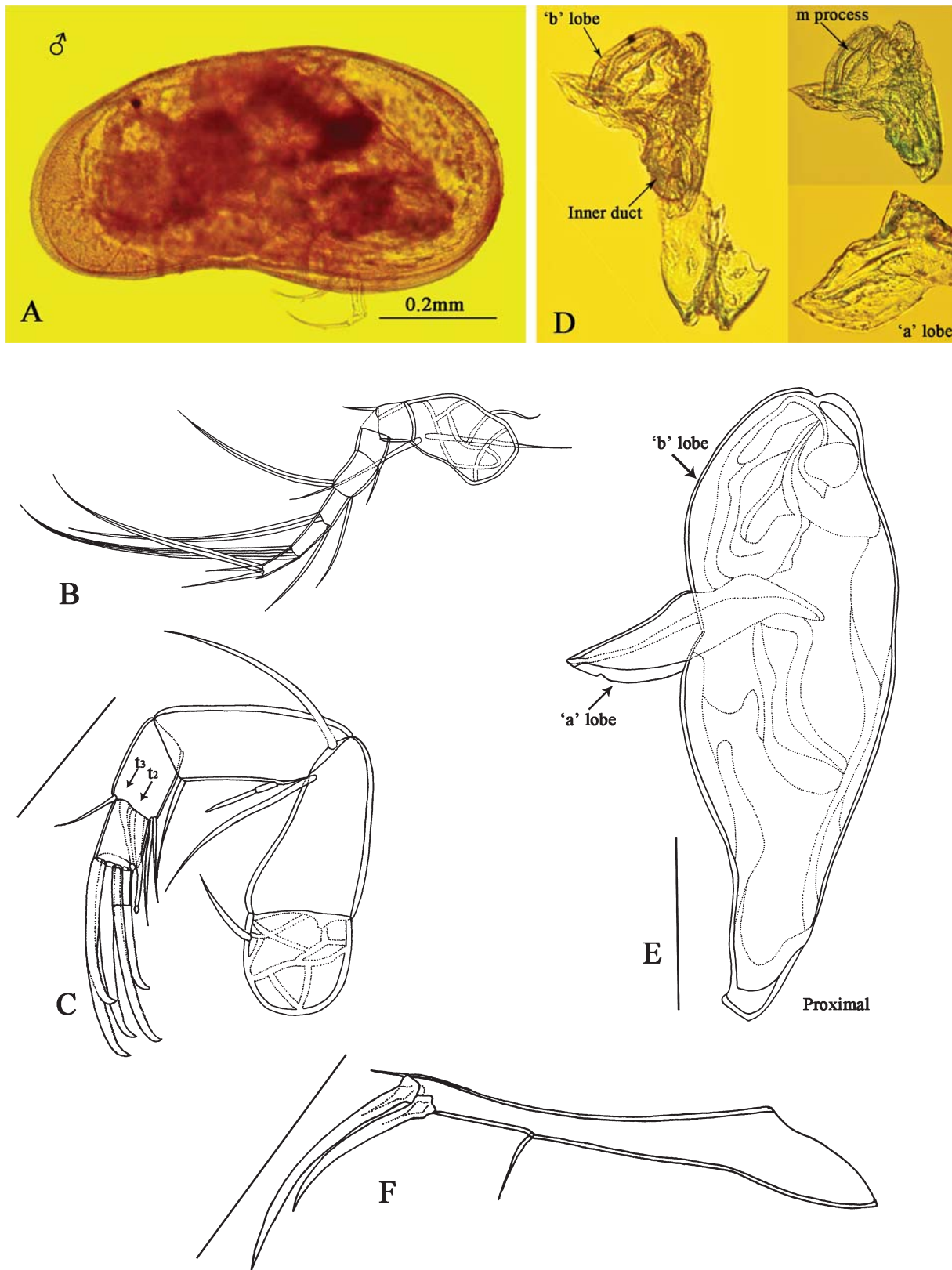
constant encouragement. Also, thankful to Dr Rabin J. Smith, Lake Biwa Museum, Japan for identification and suggestions.

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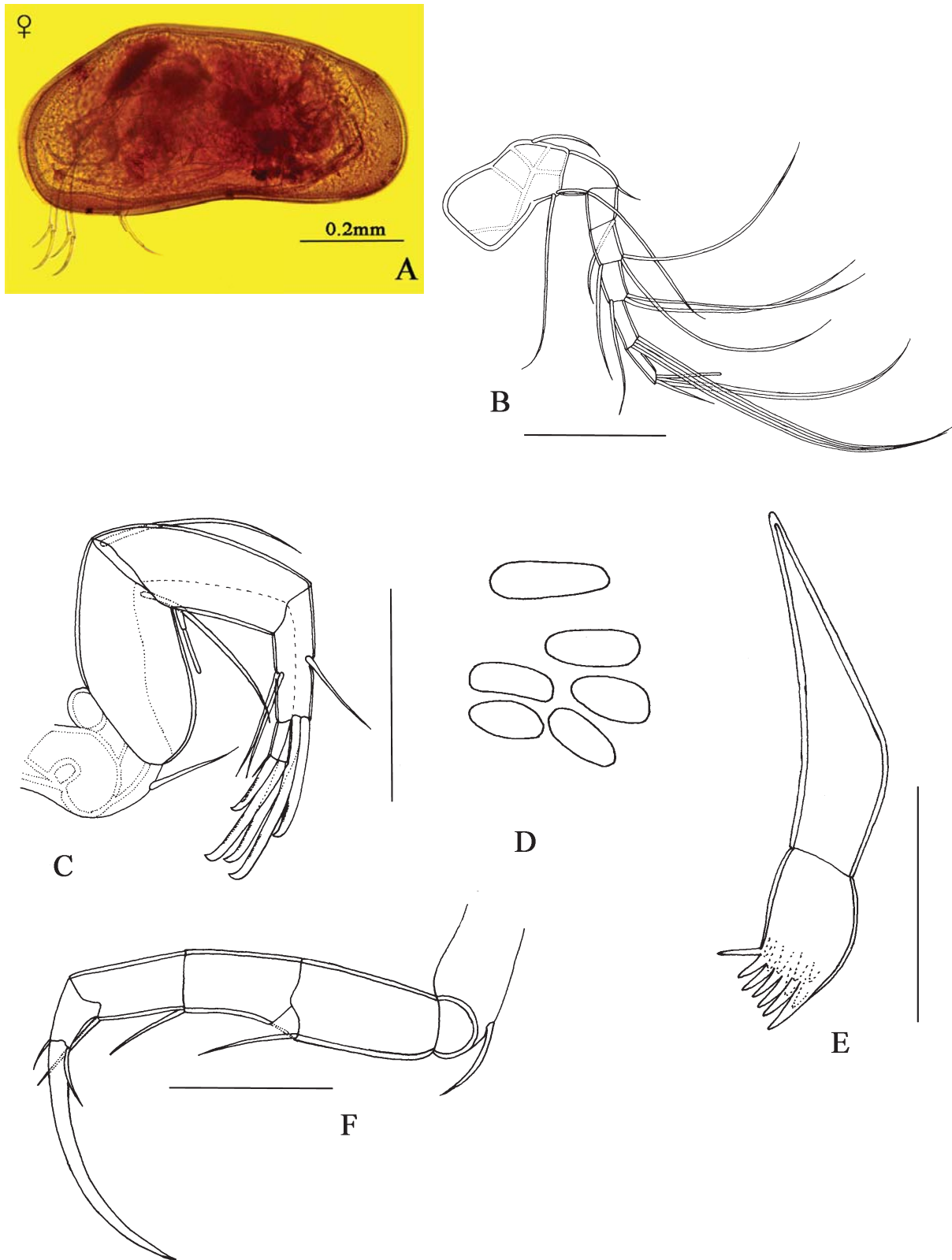
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**Fig. 2.** *Fabaeformiscandona subacuta* (Yang, 1982) ♂; A- Carapace of the male animal; B- Antennula; C- Antenna; D and E- Hemipenis; F- Uropodal ramus. Scale = 0.1mm



**Fig. 3.** *Fabaeformiscandona subacuta* (Yang, 1982) ♀; A- Carapce of the female animal; B- Antennula; C- Antenna; D- Adductor muscle scar; E- Mandibular coxal plate; F- Second thoracopoda. Scale = 0.1mm