

## THE GENUS *Dictis* L. KOCH, 1872 (ARANEAE: SCYTODIDAE) WITH DESCRIPTION OF ONE NEW SPECIES FROM INDIA.

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### ABSTRACT

A new species of the genus *Dictis* L. Koch, 1872 from Scytodidae with description of *Dictis ganeshi* sp. nov. collected from the dried leaf of banana plant and also from the mulch on the ground of banana agro-ecosystem located near Raver, Distt. Jalgaon, Maharashtra, India. It is the first record for the Indian faunistic and taxonomic studies. Diagnosis, illustration and description of the new species is presented.

**Keywords:** Araneae, Scytodidae, *Dictis*, systematic, India

### INTRODUCTION

The family Scytodidae is a relatively small which includes spiders commonly known as spitting spiders, because they eject a sticky substance through the fang to immobilize the prey. Most of the spiders of this family are nocturnal and during day they hide themselves in crevices, under litter, inside the dried and curled leaves. Species of genus *Dictis* have a leg tarsus with two claws, domed carapace however lesser domed than in *Scytodes*, six eyes in three diads, lateral eyes on tubercles and usually elongate ovoid abdomen.

According to World Spider Catalog (2015), the family Scytodidae includes to date 230 species, in five genera, of which genus *Dictis* was established in 1872 by L. Koch based on female and male of *Dictis striatipes*. So far this genus comprises only four species *D. striatipes* (China-Australia), *D. denticulata* (Thailand), *D. elongata* (Thailand), *D. thailandica* (Thailand). In this paper, I have described the male of a new species of *Dictis*, measuring about 4.17 mm of body length. This specimen was collected during the study of diversity of banana agro-ecosystems from Raver (21.25° N, 76.03° E), Distt. Jalgaon, Maharashtra, India. Sampling was carried out between 21- 25 December 2012 using visual observation method.

### MATERIALS AND METHODS

After collection and taking photographs, spiders were preserved in 70% ethanol. External morphology was examined, measured and photographed with Carl Zeiss Stemi-4 stereo-microscope equipped with image processing system. All measurements are in mm. Measurements were taken from the dorsal side. Leg measurements are given in the following order: femur, patella, tibia, metatarsus, tarsus and total. Male genital organ pedipalp was dissected and placed in 10% KOH to study its internal structures. The material is deposited in the collection of Arachnology Museum, Forest Training Institute, Chikhaldara, Maharashtra, India.

#### Taxonomy

Genus *Dictis* L. Koch, 1872

*Dictis ganeshi* sp. nov.

(Figures 1-5)

**Type material: Holotype:** Male collected from banana agro-ecosystems near Raver (21.25° N, 76.03° E), Distt. Jalgaon, Maharashtra, India, 21- 25 December 2012, Seema Keswani, deposited at Arachnology Museum, Forest Training Institute, Chikhaldara, Maharashtra-India.

**Etymology:** The specific name honors Dr. Ganesh Vankhede, Founder, Indian Society of Arachnology and University of Amravati, Amravati, Maharashtra, for his contributions to central Indian spider diversity and popularizing the subject.

**Distribution:** India

**Diagnosis:** Male of *D. ganeshi* sp.nov. is identified from the morphological striations present on the cephalothorax and abdomen which differ from the *D. elongata*, *D. denticulata* and *D. thailandica*. The male palpal morphology is somewhat similar to that of *D. elongata* but can be easily distinguished by having a single strong, distal spine present on the cymbium instead of two and also with the basally thick twisted embolus. Palpal femur is without a small, sclerotized apophysis, which is present on *D. denticulata*.

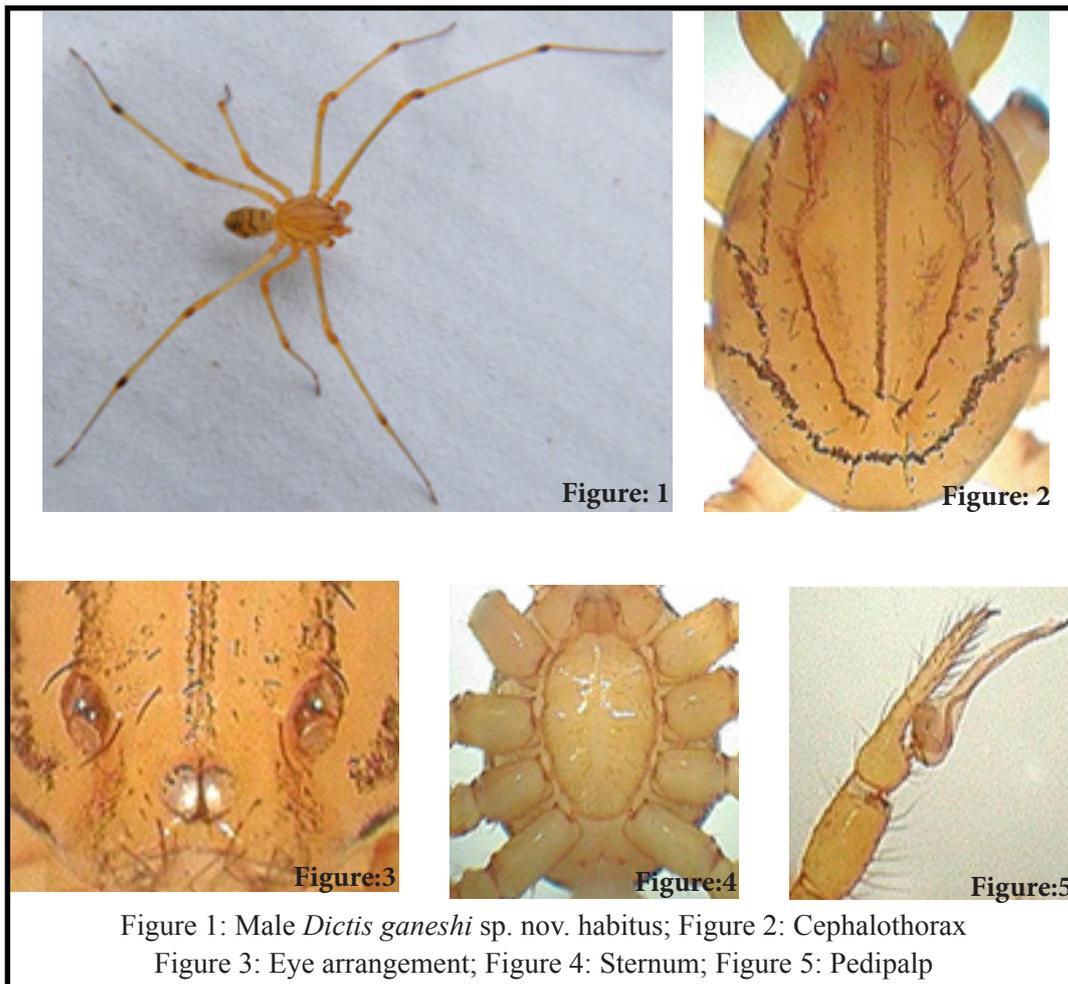
**Description of male:** Total length 4.17 mm, Cephalothorax 2.41 mm long, 2.04 mm wide, Abdomen 1.92 mm long, 1.71 mm wide, Sternum 1.24 mm long, 0.91 mm wide. Cephalothorax (Figure 2) light orange with distinct dark black brown pattern, slightly longer than wide, oval, narrow anteriorly, broad posteriorly, convex lesser than the species belonging to genus *Scytodes*, clothed with hairs, provided with one median longitudinal band extending over 3/4th length of cephalothorax, laterally median band provided with a elongate U-shaped band nearly half of its length, outer to that from the anterior end of cephalic region a pair of lateral line extending further behind, anteriorly concave up to half of its length and then become convex up to the posterior end, these lateral bands encircled by distantly placed two U-shaped bands with lateral striations in between. Fovea absent. Eyes six (Figure 3), present in three diads, white, lateral eyes oval closed to each other present on tubercles. Clypeus short with anterior margin concave. Sternum (Figure 4) pale yellow with black margin that is thick opposite to each coxa, oval, narrow posteriorly, raised with tubercles opposite to each coxa, medially with a longitudinal depression, clothed with setae. Labium pale yellow, wider than long, broad posteriorly, narrow U-shaped anteriorly, fused with sternum. Maxillae longer than wide, broad basally, narrow anteriorly, anterior half prolaterally concave, consists of small hairs, converged above labium. Chelicerae orange brown, small, chelate, dorsally consists of longitudinal black strip, also provided with stridulatory ridges and with subapical hyaline keel.

Legs long, slender, yellow brown, femora I-IV provided ventrally with a pair of black color longitudinal stripes, metatarsi and tarsi darker than the other segments, patellae and distal end of tibiae dark brown, trichobothria present on all leg segments except femora, tarsi with two dented claws.

Leg formula I-IV-II-III. Leg measurements: I (4.82, 0.55, 5.44, 6.15, 0.74, **17.7**); II (3.46, 0.52, 3.64, 3.45, 0.77, **11.84**); III (2.51, 0.50, 2.22, 2.37, 0.71, **8.31**); IV (3.72, 0.41, 3.68, 3.46, 0.84, **12.11**).

Pedipalpal (Figure 5) tibia swollen; femur cylindrical; cymbium elongate and globular basally, tapering towards apex, clothed with bristles and provided with a single strong distal spine; bulb elongate, globular at base, gradually narrowing towards the apex, showing concavity to support embolus, embolic part very long, twisted with its basal part thick and ends abruptly into a long, thin distal part, tip of embolus comes outside before the distal end of bulbous.

Abdomen yellowish brown, elongate ovoid, dorsally provided with six black colored irregular transverse lines, clothed with fine bristles.



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