

A NEW SPECIES OF *Dictis* L. KOCH, 1872 (ARANEAE: SCYTODIDAE) FROM MUMBAI, INDIA.

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ABSTRACT

A new species of spitting spider, *Dictis mumbaiensis* sp. nov. is reported from Aarey Milk Colony, Mumbai, Maharashtra.

Key Words: Scytodidae, *Dictis*, India, Maharashtra, Mumbai, nouveau taxon, Aarey Milk Colony, Natural History.

INTRODUCTION

The spitting spiders, or Scytodidae Blackwall, 1864, constitute a relatively small, pan-tropical family consisting of 5 genera and 230 species, 3 of which are cosmopolitan in distribution (World Spider Catalog, 2015; Jocqué & Dippenaar-Schoeman, 2007).

The family has hitherto been represented by a single genus, *Scytodes* Latreille, 1804 and 9 species from India, and although spiders purportedly belonging to the genus *Dictis* were collected from agro-banana plantations along the Purna river basin, in Maharashtra, this record was based on immature specimens, which were not formally described (Keswani & Vankhede, 2014; Keswani *et. al.* 2012).

Dictis L. Koch, 1872 as a genus has been represented by 4 species globally, excluding a further three species described using open taxonomy, and can be distinguished from *Scytodes* by the presence of two, rather than three tarsal claws, currently the main diagnostic character for the genus. It includes several lineages which need to be separated into genera, with all the recently described species of this formerly monotypic genus being only tentatively placed under it, pending a supra-generic revision of the Scytodidae (World Spider Catalog, 2015; Dankittipakul & Singtripop, 2010).

The present report describes a new species of *Dictis* from Aarey Milk Colony, Mumbai, based on the first mature representatives of the genus collected from the country.

MATERIALS AND METHODS

Living spiders were visually detected during nocturnal surveys conducted to document the Araneae of Aarey Milk Colony, Mumbai, a 4000 acres eclectic mix of highly varied ecosystems, predominated by cultivated grassland, and interspersed with wooded scrub and shrubland, photographed using a Canon EOS 550D, utilizing an 18-55mm lens (reversed for macro shots of martyred specimens), hand collected, euthanized and preserved

in 80% ethanol.

Female genitalia were excised, cleared using clove oil and examined with a stereo zoom microscope. Measurements provided are in mm and were taken using a digital caliper, with the leg measurements provided as follows: Total (femur, patella, tibia, metatarsus, tarsus).

Terminology used follows Dankittipakul & Singtripop, 2010. All materials examined will be deposited in the repository of the Bombay Natural History Society, Mumbai.

Taxonomy

Dictis L. Koch, 1872

Dictis mumbaiensis sp. nov.

(Figures 1-7)

Type Specimens:

Holotype (Female): Aarey Milk Colony, Mumbai, Maharashtra, 7.v.2015, 19.1485° N, 72.8818° E, Javed Ahmed and Yogendra Satam.

Paratype (Female): 23.iv.2015, data same as holotype, Javed Ahmed and Yogendra Satam.

Etymology:

The specific name is derived from the type locality, the city of Mumbai.

Diagnosis:

D. mumbaiensis sp. nov. can be distinguished from all its congeners by a combination of the following characters, namely; epigastric furrow excavated medially, sclerotized basolaterally, membranous with large glandular pores. Atrium funnel shaped, anterior margin convex, proximal part with membranous wall, the rest sclerotized. Vulva lacking posterior pouch. Head of receptacula greatly enlarged, possessing glandular pores and elongated, thick-walled stalks (Figures 5 and 6).

D. thailandicus (Dankittipakul & Singtripop, 2010), the only other species placed under the genus to lack a posterior pouch, differs significantly from *D. mumbaiensis* sp. nov. in the genitalia structure possessing a simple form, consisting of a large median bursa, with a pair of anteriorly inflated, spherical receptacula furnished with numerous glandular pores and short, slender, basal stalks (Dankittipakul & Singtripop, 2010).

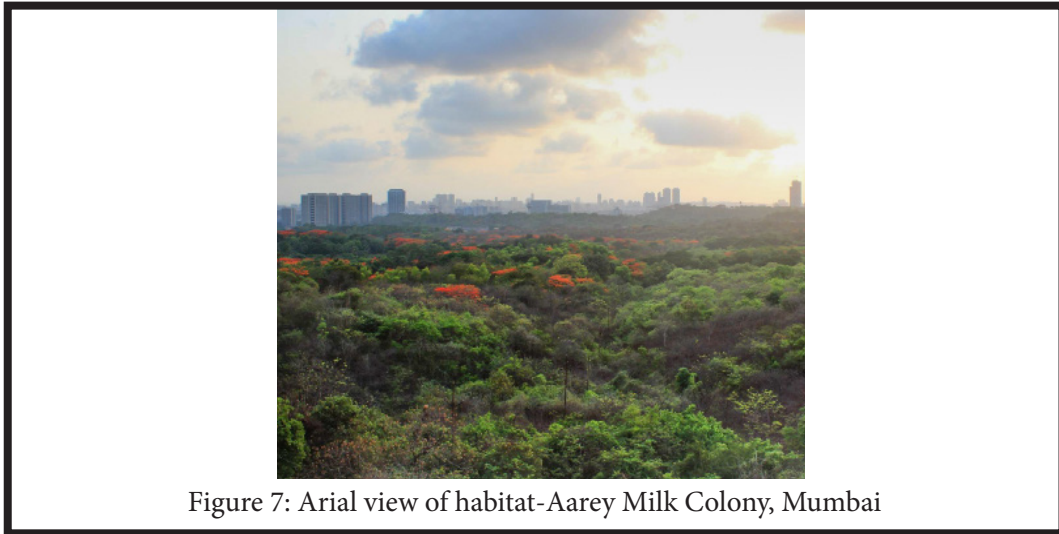
Description:

Female Holotype: Prosoma 2.70 mm long, 1.39 mm wide. Opisthosoma 2.44 mm long, 1.64 mm wide. Leg measurements: I **10.09** (2.86, 0.29, 2.77, 3.55, 0.62), II **8.25** (2.27, 0.45, 2.46, 2.51, 0.56), III **5.93** (1.66, 0.32, 1.83, 1.68, 0.44), IV **8.41** (2.47, 0.43, 2.63, 2.35, 0.53).

Female Paratype: Prosoma 2.33 mm long, 1.78 mm wide. Opisthosoma 2.76 mm long, 2.12 mm wide. Leg measurements: I **8.98** (2.35, 0.32, 2.61, 3.07, 0.63), II **5.34** (1.39, 0.31, 1.78, 1.37, 0.49), III **4.77** (1.48, 0.45, 1.55, 0.79, 0.50), IV **8.36** (2.19, 0.51, 2.55, 2.40, 0.71).

Prosoma arched, highly convex, domed posteriorly, with a dark, trident shaped mark over a dull, yellow-brown background. Edges of cephalic region darker. Opisthosoma oval, with light colored hair, possessing a distinct, hairless, shallow, yellow colored concave





parabolic depression, distally wide and covering nearly half the surface area; dorsum with a series of dark, wavy longitudinal streaks, forming faint transverse bands, extending laterally, over the sides.

Legs brown; femora dark, lighter proximally. Patella dark. Tibiae paler, distally dark, with a dorsal median band, extending to the metatarsi. Tarsi with two claws (Figure 4).

Male unknown.

Distribution:

Presently known only from Aarey Milk Colony, in the type locality, Mumbai (Figure 7).

Natural History:

A small, brownish yellow, presumably nocturnal, substratum dwelling scytodid, known to prey upon ants and araneid spiders. Holotype observed feeding on the remains of a worker class carpenter ant, *Camponotus* Mayr, 1861 sp. (Figure 2) Paratype observed feeding on a tent web spider, *Cyrtophora* Simon, 1864 sp. (Figure 3), having invaded its web, located around 2 feet from ground level.

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