

First Time Record of *Aedes scatophagoides* (Theobald, 1934) from Latur (M.S.); Deccan Plateau of India

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Abstract The presence of Culicinae mosquito *Aedes scatophagoides* (Theobald, 1934) has been recorded from some parts of world like, South Vietnam, West Pakistan, Chaina, Burma and Ceylon. In the Indian subcontinent it has been recorded so far from Delhi, Punjab Pathankot, Karwar, Bengal, Calcutta and Coastal side of south India i.e. Madras.

This paper reports the species *Ae. scatophagoides* from Latur, Maharashtra; Deccan plateau of India first time during August 2010. Thirteen mosquitoes were caught indoor and outdoor; identified from morphological features by using standard keys and confirmed. But we fail to observe breeding beds of *Aedes scatophagoides*. Barraud P. J. describes in his observation larvae of *Ae. scatophagoides* live in open natural pools and swamps are predaceous on other mosquito larvae.

Keywords *Aedes scatophagoides*; Predaceous; First time

Introduction

Aedes scattophagoides (Theobald 1901) was originally described from Myingyan, Burma (E.W. Watson) Barraud P.J. 1906 from Pathankot, Punjab; Christopher N.W. India, Karwar, Barraud 1934 from Rajputna to Burma and through central province and Madras to Ceylon. Later on from Pakistan Kucha in 1962, D.H. Gould King includes some data in 1947 including Chaina, Burma, Ceylon, Barraud also reported, those species occurs throughout tropical Africa, but apparently not further east than Burma.

This species first time reported from Deccan plateau in August 2010 at Latur District of Maharashtra, It is located 18.7 °C latitude to 73.25 °C longitude and 540-638 Mtr from sea level. Actually at the time of randomly collection of mosquito from Latur town, we got the spp in indoor as well as outdoor. Then next day we observed that *Aedes scatophagoides* is very rarely distributed in this localities.

1. Methodology

Mosquitoes were collected randomly during August

2010 and later using a flashlight and an oral aspirator. The collected mosquitoes were labeled in the field and brought to the laboratory for identification and processing. To study preferential resting sites of the vector mosquito's day time resting collections were done at different sites. The collected mosquitoes were kept separately according to different areas and dates. Identification was based on adult characters using standard taxonomic key and catalogues of Mosquitoes Identification key of Christophers S.R. (1933) Barraud P.J. (1934) and Catalog of knight and stone (1977) and other electronic online Identification key.

1.1 Study Area

Latur (18.7 °C latitude to 73.25 °C longitude) is one of the dens town in Maharashtra and well known for its earthquake in 1993 and quality education. In 2005 to 2009 maximum population were suffered with Chikungunya (23 April 2007, Loksata) and 3134 cases of elephantiasis were reported (IBN Lokmat). This area has not been any kind of work regarding mosquito during 2010. We carried out collection of vector

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mosquito from suddenly we got some species of *Ae. scatophagoides*. Then we select the same locality for monitoring. Due to monitoring we get thirteen number

of *Ae. scatophagoides* from some localities. But we did not get from other localities (Figure 1).

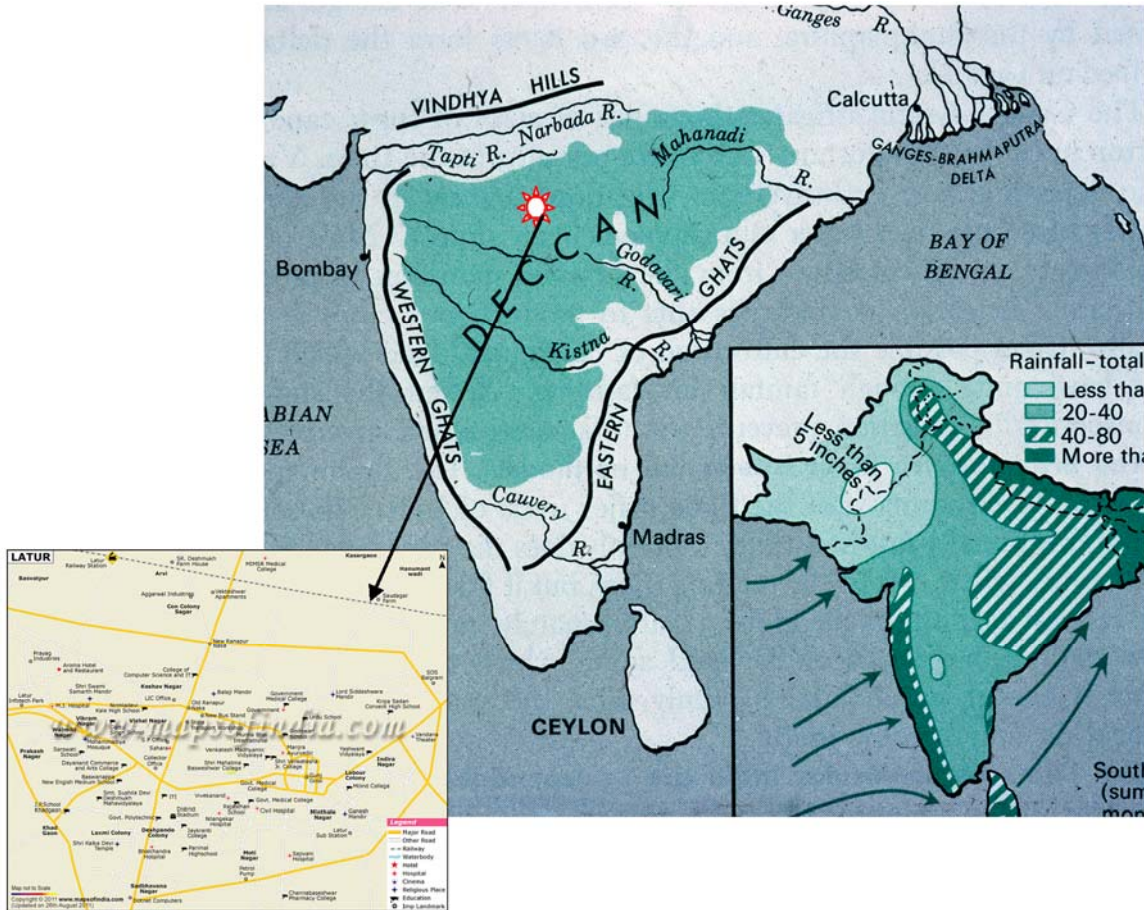


Figure 1 Map of Deccan plateau of India and study area

Note: Study area 18.7° latitude to 73.25° longitude (Latur city)

2 Discussion

2.1 Identification mark

Large yellow, white and brown mosquitoes, with outstanding scales on the body and legs, giving them a shaggy mouldy appearance. Wing membrane clouded in region of C-W, 2-3, 3-4, these three being almost in a straight line sub genus—MUCIDUS.

It is dark brown mosquito with tip of abdomen broadly golden.

Hind tarsi dark with narrow yellow rings and fifth segment conspicuously whitish: Wings nearly bare — *Ae. scatophagoides*.

The adults of this species resemble in general habitus

among the other members of the Mucidus Group. They differ, however in having a medial white band on the first tarsomere. This character is shared with *alternans* from the Australasian Region and *sudanensis* from Africa. But they can easily be separated. The apical white band of the femora is subapical in *alternans* and apical in *scatophagoides* and *sudanensis* Barraud P.J. (1934). The latter can be separated on the presence of white scales on the proboscis (*scatophagoides*). The males of *scatophagoides* apparently differ from all other Mucidus in having the torus without scales Knight (1947). Barraud lists open natural pools as breeding sites. Material from Vietnam was reared from larvae collected in a ditch, a rice paddy, and a swamp. The larvae like in open and

swamp are predaceous on other mosquito larvae (Barraud 1934). But we did not recognize breeding site and the larval collection from study area.

2.2 Taxonomic discussion

Antenna light to dark brown, flagellomere I with a moderate patch of white scales on mesal margin; torus with white scales on mesal half; clypeus bare, typical for the group; palpus brown 0.66 length of proboscis, segment I small and dark, segment II with erect white and yellow scales. The yellow scales with dark tips. Segment III mostly white scaled with scales at base decumbent. Segment IV all white scaled; proboscis with 6 basal bristles, scales mainly decumbent but with some erect and semi-erect scales on basal half. Scales are dark and white at base, white at middle, and yellow with some dark tipped scales at apex. No white ring at apex; labellum light to dark brown; vertex clothed with erect and decumbent scales. Erect scales white and dark, narrow, few forked, with some narrow decumbent white scales beneath; orbital bristles pale; orbital line with decumbent white scales. Femora with basal and apical white bands, mid and hind femora with white bands at basal and apical third, band at basal third sometimes absent, fore femur with many white scales, basal white band sometimes enlarged covering 0.33 of femur, scales of femur small and decumbent on basal 0.5, larger and with some erect scales near apex; tibia with basal, medial, and apical white bands, scales erect, semi-erect and decumbent, darker scales very dark brown. Tarsi with most segments with white bands, hind tarsomere I variable, with basal and medial white bands. Tarsomeres II, III with basal white bands, all scales decumbent with some semi-erect dark tipped scales on hind tarsomere I; fourth and fifth tarsomeres of fore and mid tarsi with or without white bands. Tarsal claws equal with 1 tooth, Squama with fringe hairs pale, vein scales yellow, white and brown; costa usually entirely yellow on apical third; fringe with distinct dark and white bands of variable size. Halter pale with light scales noticeable at apex. Abdomen, Basal terga with yellow and dark tipped yellow scales in predominance, white scales confined to lateral tufts and a median patch or stripe, segments VI and VII mostly all white with some lateral yellow scales.

Wing 5.5~6.5 mm, proboscis mainly yellow with a

variable amount of white scaling in middle. Palpi rather more than Q length of proboscis, shaggily clothed with dark brown, yellow and white scales.

Thorax with light matt grey integument, mesonatal scales light brown and white, latter in long tufts. Costa of wing mainly yellow in some specimens, in others dark scaled from base for some distance, but there is usually a large yellow streak towards apex of wing extending on to vein 1.

Legs: brown, with numerous white rings, including three on each tibia (at base, middle and tip) and two on the first segment of each tarsus (at base and middle), segments 2~5 of hind tarsus each with a white basal ring (Figure 2).

First hind tarsal segment barely 2 length of tibia. Abdomen with brown and white scales, latter predominating especially towards tip S-Resembles. Palpi is longer than proboscis by about length of last two segments which are enlarged and spatulate; apical 4 of palp with dense hair-tufts (Figure 3).



Figure 2 Head and Legs of *Aedes scatophagoidea*



Figure 3 Abdomen of *Aedes scatophagoidea*

Mesonotal scales often lighter than in 9. From the above all said identified characters the described species of mosquito is *Ae. scatophagoides*.

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