RECORDS OF CULEX (CULEX) HUTCHINSONI BARRAUD (DIPTERA: CULICIDAE) IN KARNATAKA, INDIA

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ABSTRACT. Culex hutchinsoni Barraud, 1924 has been recorded from several localities in Thailand, Cambodia, Vietnam, Malaysia, Singapore, and Burma. In the Indian subcontinent it has been recorded so far only from the type locality in Meghalaya, Lahore (Pakistan), and Nepal. This communication records this species for the first time from the Kaveri basin in Karnataka, southern peninsular India, which extends the geographic range of the species to a far wider area of the Oriental Region.

INTRODUCTION

Culex (Culex) hutchinsoni Barraud, 1924 was originally described from specimens collected from Nangpoh, Khasi Hills, Assam (now Meghalaya) (Barraud 1924, 1934). Subsequently, the species has been redescribed and recorded from several localities in Thailand, Cambodia, Vietnam, Malaysia, Singapore, and Burma (Colless 1955, Bram 1967, Sirivanakarn 1976).

In the Indian subcontinent the species has been recorded from the type locality in Meghalaya (Barraud 1924), Lahore (Pakistan) (Sirivanakarn 1976), and Nepal (Pradhan and Darsie 1989, Darsie and Pradhan 1990). The species has not been recorded previously from southern peninsular India.

This communication reports the first record of the species from southern India based on specimens collected during bioecological studies of mosquitoes associated with repeated epidemics of Japanese encephalitis in Mandya district, Karnataka (Mishra et al. 1984).

SPECIMENS COLLECTED AND EXAMINED

All the specimens were collected from a 3 m deep irrigation ditch dug for watering coconut palms in a garden at Tadagawadi village (approx. 76° 43′ E, 12° 25′ N), Shrirangapatna Taluk, Mandya district, Karnataka. Water in the ditch was highly polluted with decaying organic matter.

Ref: Nos. AA.33577, collected on March 2, 1993 as larvae and reared: 10¢, 3ç, 9 larval skins, 1 whole larva, 3 male terminalia; AA.33581, collected on March 5, 1993 as larvae and reared: 66¢, 45ç, 3 associated larval and pupal skins for each sex, 1 whole larva, 1 larval skin. The specimens are deposited in the collection of the National Institute of Virology.

The species was identified by the distinctive markings of the pleuron, banding on the abdomen, phallosome of the male terminalia, and the single subapical spine on the siphon of the fourth instar larva. Other morphological details of adults, pupae, and 4th-instar larvae conform to descriptions of the species (Barraud 1924, 1934, Colless 1955, Bram 1967, Sirivanakarn 1976).

ASSOCIATED SPECIES

The following species were reared from immatures collected with those of Cx. hutchinsoni; Anopheles barbirostris Van der Wulp, 18, 19; Cx. fuscocephala Theobald, 28, 49; Cx. gelidus Theobald, 38, 29; Cx. undet. sp. nr. mimuloides Barraud, 58, 69; Cx. quinquefasciatus Say, 318, 469; Cx. tritaeniorhynchus Giles, 18, 19; Cx. univittatus Theobald, 18, 29; Cx. pallidothorax Theobald, 838, 799; Cx. minutissimus (Theobald), 28, 49; Cx. fusca-

nus Wiedemann, 5ô, 3º; Uranotaeia campestris Leicester, 2ô, 2º.

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