Pacific Insects 13 (1): 119-121 15 June 1971

CONTRIBUTION TO THE KNOWLEDGE OF *AEDES* (*STEGOMYIA*) *HOGUEI* BELKIN 1962 (Diptera: Culicidae)

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Abstract: The first finding of *Aedes* (*Stegomyia*) *hoguei* Belkin 1962 outside Rennell Island is reported from Bellona Island where fourth instar larvae were collected from an open rock pool in the forest.

A full description of female imagos is given, based on 18 females caught biting man in a forested area on Rennell Island. This complements the original list of characters which was based on 2 incomplete specimens.

Fourth instar larvae (4) of *Aedes* (*Stegomyia*) *hoguei* Belkin 1962 were collected by one of us (M. M.) on Bellona Island, on 30 April 1969. This is the first record of *A. hoguei* outside Rennell Island, the only place from which this species had been reported in the past.

Bellona Island, about 160 km S of Guadalcanal Island, in the British Solomon Islands Protectorate, is 10 km long and oval shaped. A raised coral atoll, it is a block of limestone, in the form of a basin, and it has a sunken central valley, along which live its 600 Polynesian inhabitants, and a rocky vegetated rim, rising to 60–75 m above sea level.

The larvae were collected on the forested rim, SE of Matahenua village. The breeding site was a small (38 cm diam., 2.5–5 cm depth) open rock pool of clear rain water, containing a few dead leaves. Preserved in MacGregor and mounted in Polyvinylic Lactophenol, the larvae present (M. M.) the characters of the species as given by Belkin (1962).

Eighteen female imagos (at present deposited in the British Museum (N. H.), London, England) of what are considered to be *A. hoguei* were captured by one of us (M. M.) on Rennell Island, on 7 February 1970.

Rennell Island, located 24 km SE of Bellona, has geological and environmental characteristics similar to those of Bellona. However, it is considerably larger—74 km long and 13 km across—and while a 24-km lake (Tenggano) occupies most of its eastern half the remainder is a slightly elevated and densely forested basin, with a rocky rim. The population, of about 1000 Polynesians, is scattered.

The place of capture of the imagos, known to the local population as Ongomelange, is a traditional stop on the 3-hr walk along the rough and stony path from Naone (a few huts among coconut palms at the seashore of the NW tip of the island) to Hongauvea, an inland village. Ongomelange is reached from Naone after 15 minutes of steady steep climbing, and it is the highest point (about 105 m a. s. l.) along the path, on the

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rim and in full forest. A rest is therefore usual in Ongomelange, for the rare traveller.

During the short stop (15 min.) the imagos attacked persistently and were easy to capture.

A brief search in Ongomelange for possible breeding places—rocks, trees—yielded negative results; nor were larvae of *A. hoguei* found in a few similar breeding places over 1 km inland, where other species were collected.

It is worth noting that no imagos of *A. hoguei* had been captured 1 month earlier during an overnight stay in Naone. Only females of *Aedes* (*Stegomyia*) *hebrideus* had been caught, attacking at sunrise.

Description of the ♀ imago

The description of the ♀ imago of *A. hoguei* given by Belkin (1962) is based on 2 incomplete specimens.

The number of females now available (18) has enabled one of us (B. T.) to complete and amend Belkin's list of characters. The proposed new list, following Belkin, is given below.

The description of the legs is entirely new, including the measurements of the fore-femur, Belkin having been able only to describe the legs of the ♂.

The main amendments refer to the measurements of the wing and abdomen, these two being smaller than those given by Belkin; the coloration of the labium; the markings on the thorax, particularly the posterior dorsocentral line and the median scutellar lobe; and the abdomen markings, especially the occasional presence of a few scattered dorsal silvery scales on tergite VI, given as IV by Belkin (a misprint, Belkin, pers. commun.).

Characters

A member of the *Scutellaris* group (Belkin 1962)

♀. *Wing*: 2.9 mm. *Proboscis*: 1.9 mm. *Forefemur*: 1.9 mm. *Abdomen*: About 2.2 mm. *Head*: Eyes moderately separated, frontal scaling extensive; median silvery line relatively broad, reaching erect scales; orbital silvery line partially developed; lateral silvery line narrow; labium rarely with whitish streak ventrally; apical palpal segment silvery for more than distal half. *Thorax*: Median silvery line normal; lateral prescutal line not developed; supra-alar silvery line complete, with broad scales posteriorly; posterior dorsocentral line usually faintly discernible with golden scales; prescutellar line distinct with golden scales; median scutellar lobe with few or no dark scales apically; pleural scaling in narrow streaks, forming distinct diagonal lines; *apn* streak narrow, upper *stp* narrow, not extending to *ssp* face, lower *mep* small not connected to narrow upper. *Legs*: Forecoxa with median band of dark scales; midcoxa with large apical patch of dark scales; hindfemur with an anterior light streak almost to apical light patch; foretarsal segments 1 and 2 with a small basal dorsal patch of white scales; midtarsal segment 1 with a few basal dorsal white scales, remainder dark; hindtarsal segments 1, 2 and 3 with restricted basal white scaling, segment 4 white for about basal 0.6, segment 5 completely white. *Wing*: Costa with a few white or whitish scales at the base. *Abdomen*: Tergites II-VI with arcuate lateral silvery markings, the dorsal parts submedian on III-V and not connected by transverse bands; VI sometimes with a few scattered dorsal silvery scales; VII with straight median lateral transverse silvery line not connected dorsally.

Bionomics

The circumstances of the larval and adult collections lead us to regard *Aedes (Stegomyia) hoguei* as a forest species, willing to attack man.

Acknowledgments: We should like to thank Prof. J. N. Belkin for his consideration and advice.

The paper is published by kind permission of the Director of Medical Services, British Solomon Islands Protectorate, Dr J. D. Macgregor.

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