

reading micrometer apparatus (made by Kogaku Co.; reading error: ± 0.005 mm) attached to a stereoscopic microscope under a magnification of $80\times$ to $120\times$, and given in mm.

Amblyopone zwaluwenburgi (Williams)

Stigmatomma (*Fulakora*) *zwaluwenburgi* Williams, 1946: 639–640, fig. 1. Worker. Type locality: Experiment Station, H. S. P. A., Honolulu, Oahu, Hawaii, (2 workers, ii–1941, 26–x–1945, R. H. Van Zwaluwenburg leg.). [Headless holotype and a paratype workers in BPBM examined. No other types exist (Williams, 1946).]

Amblyopone zwaluwenburgi: Brown, 1960: 169. [*Stigmatomma* synonymized under *Amblyopone*.]; Taylor, 1978: 833.

Worker. HL -, 0.40; HW -, 0.40; CI -, 100; ML -, 0.30; SL -, 0.20; SI -, 50; PL 0.29, 0.27; PW 0.25, 0.26; WL 0.52, 0.53; PtNL 0.15, 0.15; PtW 0.21, 0.23; G1L 0.15, 0.17; G1W 0.26, 0.29 (Headless holotype and head-bearing paratype were measured).

Head in full-face view as long as wide, with posterior margin slightly concave medially, sides feebly convex, slightly diverging anteriad. Mandibles slender, their outer margins feebly convex (almost straight at basal 2/3), with 7 teeth: an acute apical, a very minute (hardly recognizable) subapical, and 5 teeth which are single ranked and become shorter proximally; the distal 2 of the 5 teeth recurved, the middle feebly recurved, and the proximal 2 almost conical. Genal teeth absent. Clypeal apron feebly convex, with 5 blunt-tipped, conical teeth of nearly equal size. Frontal lobes close to each other, separated by a shallow, narrow linear groove. Antennae 11-segmented. Scapes a little curved near the apex, extending back to the posterior 1/3 of head. Funicular segments I and II 1.5 times as wide as long, III to VI more than twice as wide as long, VII to IX twice as wide as long, X (apical) twice as long as wide (apical segment width 0.065 mm). Eyes absent.

Mesosoma in dorsal view widest at the middle of pronotum and narrowed at the base of propodeum. Pronotal dorsum almost flat, not marginate laterally. Promesonotal suture distinct, situated at the middle of mesosomal dorsum. Metanotal suture absent. Mesonotal to propodeal dorsum 1.2 times as long as wide, with sides diverging posteriorly; declivity feebly concave, marginate laterally. Petiole with a subpetiolar process, which is probably anteriorly produced (unable to see fully).

Head and mesosoma a little shining, propodeal

declivity and gaster more shining. Mandibles with several longitudinal rugulae. Head, mesosoma and petiole finely and densely granulose. Gaster sparsely punctate.

Body with dense decumbent to appressed pubescence. Head dorsum with several erect setae. Scapes each with a long seta near the base and a longer seta on the basal 1/6. Mesosomal dorsum with several short erect setae. Petiolar dorsum with a few erect setae. Gastral tergites with numerous erect setae.

Body entirely brownish yellow. Scapes, funicular segment I, and legs a little lighter colored.

Remarks. I could not obtain the whole figure of the subpetiolar process due to the twisted posture, but perhaps it is small. The antennae of the paratype are 11-segmented, although in the Williams' (1946) illustration the holotype has 12-segmented antennae (the present holotype bears no head).

This species is known only from the types collected in the Hawaii.

Amblyopone caliginosa sp. nov.

[Japanese name: Hime-nokogiri-hariari]

(Figs. 1–9)

Amblyopone sp.: Sonobe, 1972: 179. [Specimens examined.]

Amblyopone sp. 3: Onoyama, 1989: 12, figs. 3.18b, 3.19b. [Specimens examined.]

Worker. HL 0.51, 0.48–0.52; HW 0.43, 0.42–0.44; CI 84, 82–88; HD 0.26, 0.26–0.27; ML 0.36, 0.35–0.38; SL 0.24, 0.23–0.25; SI 56, 52–60; FLW 0.10, 0.10–0.11; PL 0.26, 0.23–0.27; PW 0.29, 0.29–0.30; WL 0.59, 0.58–0.62; PtNL 0.15, 0.14–0.15; PtW 0.20, 0.21–0.22; G1L 0.20, 0.17–0.19; G1W 0.29, 0.28–0.30; G2L 0.19, 0.18–0.22; G2W 0.37, 0.34–0.37. (Holotype and 5 paratypes were measured and respectively presented.)

Head (Fig. 1) in full-face view rectangular with very feebly convex posterior margin and rounded posterolateral corners, sides very weakly convex and diverging anteriad. Mandibles (Fig. 2) slender with nearly straight outer margins except for apical 1/4, with 7 teeth; apical tooth long and acute, preapical tooth small and triangular, and 5 single-ranked teeth decreasing in size basad, elongate trapezoidal (distal 2) to short trapezoidal (basal 2nd and 3rd) and bluntly triangular (basalmost) in dorsal view. Palp formula 2 (maxillary), 3 (labial) (counted in a paratype by its SEM pictures). Genal teeth absent. Anterior clypeal border broadly and gently convex, with 5 peg-like teeth: the longest median tooth, a pair of lateral ones of medium length, and a pair of more lateral short