



Figs. 6-9. *Amblyopone caliginosa* sp. nov. — 6, Mesosoma and petiole of worker in dorsal view; 7, mesosoma and petiole of worker in lateral view; 8, mesosoma and petiole of female in dorsal view; 9, petiole to gastral segment III (abdominal segment V) of female in lateral view.

petiolar node. Subpetiolar process (Fig. 7) lobe-like, producing anteroventrally. Gastral tergite II wider than gastral tergite I, 1.7 times as wide as long. Gastral apex not laterally compressed; sting stout.

Dorsa of head and mandibles longitudinally rugulose. Scapes smooth. Mesosoma smooth except for hair pits, which make the surface punctulate. Punctuation on propodeum sparser than in other parts of mesosoma. Dorsa of pronotum and mesonotum with weak transverse rugulae. Petiole nearly smooth. Gaster and legs smooth.

Fine, short erect to subdecumbent hairs densely distributed on body and appendages, but hairs on mesosomal sides are subdecumbent to decumbent.

Body color slightly brownish yellow to yellowish brown.

**Female.** HL 0.53; HW 0.44; CI 83; HD 0.30; ML 0.35; SL 0.26; SI 59; FLW 0.11; EL 0.09; PL 0.18; MsL 0.27; MsW 0.36; WL 0.77; PtNL 0.15; PtW 0.24; G1L 0.23; G1W 0.33; G2L 0.25; G2W 0.41. (a paratype was measured.)

Slightly larger than workers. Head as in Fig. 3 and mesosoma to gaster as in Figs. 8 and 9. Similar to workers, with the usual caste differences. Three ocelli well developed. Compound eyes large, with relatively long, erect hairs. Apical parts of clypeal denticles with a little curved longitudinal carinae (Fig. 5) as in workers. Petiole in profile (Fig. 9) a little pro-

portionately lower than in workers.

**Holotype worker:** Cape Manazuru, Kanagawa Pref., 13. xii. 1981, K. Masuko leg. (Type No. OMNH TI 102, Osaka Museum of Natural History)

**Paratypes:** 1 female and 4 workers, data same as the holotype; 1 worker, Cape Manazuru, Kanagawa Pref., 19. ix. 1982, K. Masuko leg. (Osaka Museum of Natural History and collection of K. Onoyama, Obihiro University)

**Other material examined.** 1 worker, around Oonami-no-ike, Kirishima area, Kagoshima Pref., 1400 m above the sea level, 25. vii. 1971, K. Morikawa leg.

**Distribution.** Honshu, Kyushu.

**Remarks.** *A. caliginosa* resembles *A. zwaluwenburgi* in having 11-segmented antennae, 5-toothed clypeal apron, and mandibles with single-ranked 7 teeth. However, it differs from the latter in having longer head with the sides more diverging anteriorly, relatively longer scapes, median clypeal tooth longer than others (5 teeth subequal in size in *A. zwaluwenburgi*), mandibular teeth not recurved, mesosomal dorsum in profile convex (almost straight in *A. zwaluwenburgi*), and larger body size.

The following key is to distinguish between *A. caliginosa* and *A. zwaluwenburgi*:

Clypeal teeth equal in length. Head as long as wide.

Mesosomal dorsum in profile almost straight

.....*A. zwaluwenburgi*