

APPENDIX 1B

Description and record of a new and
a little known ants from Japan (Formicidae)

by Mamoru Terayama

Crematogaster (Orthocrema) suehiro

Terayama, sp. nov.

(Figs. 1-4)

Crematogaster sp. 2: Onoyama and Morisita, 1992, A guide for the identification of Japanese ants (III): 62.

Japanese name Suehiro-siriageari.

Description of holotype Worker. Head length 0.51 mm; head width 0.50 mm; scape length 0.49 mm; cephalic index 98; scape index 98; Weber's length of alitrunk 0.63 mm; petiole length 0.25 mm; petiole height 0.15 mm; dorsal petiole width 0.18 mm; total length 2.0 mm.

Body yellow.

Head as long as wide, with straight posterior margin in full face view; posterolateral corner convex, not forming an angle. Mandible with 4 teeth; apical 2 teeth acute and larger than basal 2. Clypeus with a pair of longitudinal carinae; anterior margin convex. Antenna with 11 segments; scape exceeding posterior margin of head in full face view; 2nd segment 2.3 times as long as wide; 3rd to 8th each as long as wide; 9th slightly shorter than wide; 10th 1.5 times as long as wide; 11th 2.3 times as long as wide. Eye prominent, 0.13 mm in maximum diameter.

Promesonotal dorsum straight in profile; dorsal surface of promesonotum flat; dorsolateral margin of mesonotum carinate. Propodeal spine long and acute.

Petiole longer than high in profile; in dorsal view,

lateral margins converging toward the base. Subpetiolar process present, but small. Postpetiole slightly wider than petiole, with moderately convex sides in dorsal view.

Head and alitrunk smooth and shining; petiole with weakly micropunctate sides and smooth and shining dorsal surface; postpetiole smooth and shining; gaster largely smooth.

Dorsum of body including head with long erect and suberect hairs.

Paratype Female. Head length 0.70 mm; head width 0.70 mm; scape length 0.58 mm; cephalic index 100; scape index 82; Weber's length of alitrunk 1.38 mm; petiole length 0.45 mm; petiole height 0.25 mm; dorsal petiole width 0.30 mm; total length 4.1 mm.

Head, alitrunk, petiole, postpetiole, and 1st gastral segment yellow; 2nd to terminal segments of gaster brown.

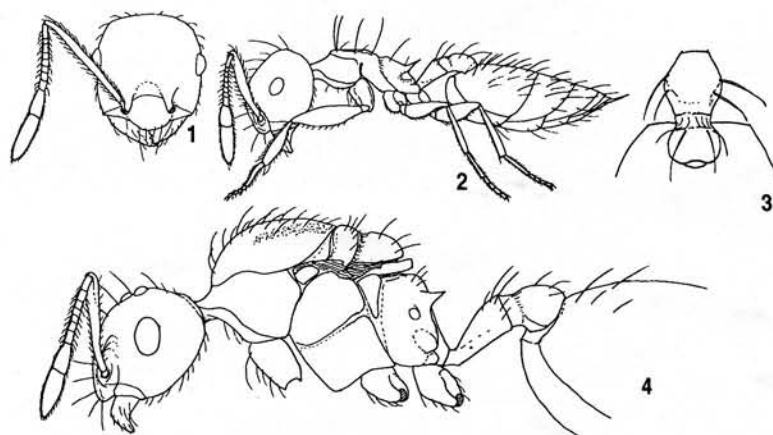
Lateral margins of petiole converging toward the base in dorsal view. Head and alitrunk smooth and shining; petiole with micropunctate sides and smooth dorsum; postpetiole smooth; gaster smooth and shining.

Holotype Worker, Banna-dake, Ishigaki-jima, Okinawa Pref., VIII. 1994, H. Takamine leg.

Paratypes 2 workers, 1 female, 1 intercaste, same data as holotype; 3 workers, Omoto-dake, Ishigaki-jima, 16. III. 1984, M. Morisita leg.

Type depository Museum of Nature and Human Activities, Hyogo.

Distribution S. Ryukyus.



Figs. 1-4 *Crematogaster suehiro* sp. nov. (1-3: worker; 4: female). 1: Head, frontal view; 2, 4: body profile; 3: petiole and postpetiole, dorsal view.

Remarks This species is easily distinguished from the other Japanese *Orthocrema* species, *C. (O.) osakensis* Forel, by the shape of petiole and smooth and shining mesopleuron. An intercaste is worker-like in morphology, but it has 3 ocelli and convex promesonotal dorsal outline, and body size is larger than workers.

Solenopsis tipuna Forel

Japanese name Okinawa-tofushiari

Solenopsis sp. 3 in Terayama (1992) is conspecific with *S. tipuna* Forel which has been previously known from Taiwan.

Specimens examined Japan - 20 workers, Gusuku, Amami-oshima, Kagoshima Pref., 26. III. 1980, M. Terayama leg.; 3 workers, Tokuno-shima, Kagoshima Pref., 29. VII. 1985, M. Terayama leg.; 4 workers, Shuri, Okinawa-jima, Okinawa Pref., 13. IX. 1981, M. Terayama leg.; 10 workers, Iriomote-jima, Okinawa Pref., 18. III. 1984, M. Terayama leg.; 32 workers, Iriomote-jima, Okinawa Pref., 29. III. 1991, M. Terayama leg. Taiwan - 3 workers, Nanfen-cun, Nantou Hsien, 16. VIII. 1980, M. Terayama leg.; 13 workers, Puli, Nantou Hsien, 4. VIII.

1981, M. Terayama leg.; 25 workers, Liukuei, Kaohsiung Hsien, 17. VIII. 1987, M. Terayama leg. 5 workers, Kenting, Pintung Hsien, 28. VII. - 2. VIII. 1988.

Remarks This species is very similar to *Solenopsis japonica*, but distinguished from the latter by having a distinctly convex ventral margin of petiole and much more strongly convex dorsal and posterior propodeal margins in profile. *S. tipuna* nests in soil or under stones.

Distribution N. (Nakano-shima and southward) to S. Ryukyus; Taiwan.

References

- Onoyama, K. and Morisita, M. 1992. Genus *Crematogaster*. In: Myrmecological Society of Japan (ed.), *A guide for the identification of Japanese ants (III) Myrmicinae and supplement to Leptanillinae (Hymenoptera: Formicidae)*, pp. 59-62. The Myrmecological Society of Japan, Tokyo.
- Terayama, M. 1992. Genus *Solenopsis*. In: Myrmecological Society of Japan (ed.), *A guide for the identification of Japanese ants (III) Myrmicinae and supplement to Leptanillinae (Hymenoptera: Formicidae)*, pp. 41-42. The Myrmecological Society of Japan, Tokyo.