A Remarkable New Neotropical Species in the Ant Genus
Odontomachus Latreille (Hymenoptera: Formicidae)

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(With 4 text-figures)

Odontomachus allolabis sp. n.

Female (holotype). Total length 9.4 mm; head length 1.97 mm; head width (eyes included) 1.65 mm; mandible length 1.19 mm; maximum diameter of eyes 0.39 mm; Weber's length of thorax 2.39 mm; pronotum width 1.24 mm; hind femur length 2.41 mm; cephalic index (head width over head length x 100) 84; mandibular index (length of dorsally exposed mandible over head length) 52. Color reddish brown. Integument smooth and shining with the following exceptions: Mandibles finely and superficially punctulate excepting the smooth apical teeth; frons and vertex of head with fine longitudinal costulae that spread out in a fanlike fashion laterally and posteriorly as shown in Fig. 1, fine interstitial punctulae present; dorsum of pronotum with regularly and semicircularly arranged costae, the ends of which touch nearly perpendicularly the promesonotal suture, laterotergite of pronotum horizontally to obliquely costate-rugose, with a smooth patch antero-inferiorly; mesonotal scutum weakly longitudinally costate on sides, with a broad, nearly smooth stripe in the middle which is traversed by a lone and distinct sagittal costa; paraptera broadly joined in the middle, bearing a total of five very strong, widely spaced longitudinal costae, the intervals between these costae deeply impressed; basal and declivous face of propodeum strongly transversely costate, the costae continuing obliquely or horizontally forward on sides of thorax, but are lacking on the entirely smooth and shining mesopleura; femora, tibiae and tarsomeres finely and superficially punctulate, still quite shining. Standing hairs scarce (partly rubbed off in the somewhat damaged specimen); fine appressed or decumbent pubescence scattered and inconspicuous on body; dense and appressed on outer border of mandibles and on legs.

Head as shown in Fig. 1; note the strongly constricted occipital portion which is little broader than half the maximum width of head including the protruding eyes; occiput faintly
carinate, the carinae not simply fusing in the middle but each turning forward and fusing more anteriorly within the deeply impressed sagittal occipital sulcus. Eyes unusually large, occupying in full-face view the entire antero-lateral bulge of sides of head. Mandibles relatively short, the basal two thirds of inner border of shaft vestigially dentate; the apical dentition peculiar with only two teeth, the dorsal tooth much shorter than the ventral, shortly pointed in dorsal view, subtruncate in frontal view (Figs. 1, 2, 3). Antennae missing. Thorax with mesonotal scutum much broader than long (40: 31). Mesopleura antero-superiorly with a faint, very lightly marginate but scarcely projecting lobe. Basal face of propodeum much longer than declivous face. Wings missing. Petiole as shown in Fig. 4.


Discussion. The peculiar apical dentition of mandibles, as described above and shown in Figs. 1-3 — unique in the genus — made me to describe this new species, even though it is represented by only two queens, a partly damaged dealate specimen, and a somewhat shriveled callow. The distinctive head shape, i. e. the strongly narrowed occiput (Fig. 1) suggested at first the suspicion that this be a case of a malformation due to Mermis infection, not uncommon in Odontomachus (cf. the microcephalous var. leptocephalus of cheifer which only later was recognized as a nemathoriform of the latter species, Emery, 1904: 594). The presence of well-formed wings and the absence of a parasite in the normal, not swollen gaster (opened up for this purpose) eliminates this hypothesis and vouch for a normally developed specimen.

O. altolabis, though remarkably distinct in its own right, may be compared with the sympatric mayi, differing in the female caste from the latter in the following features: mandibles more slender, apical fork with only two teeth, the intercalary tooth missing; head much narrowed behind; mesonotal scutum feebly costate with a mesial smooth stripe (the strong sagittal costa is shared by mayi, the only other Neotropical species known to me that has this feature in the queen); mesopleura with the antero-superior lobe only vestigial; the posterolateral furrow, that typically delimits the frons in Odontomachus, scarcely impressed, at best vestigial.

The paratype queen from Limoncocha, with antennae and wings still present, measures as follows: Total length 9.3 mm; head length 1.92 mm; head width 1.56 mm; scape length 2.16 mm (longer than head length!); Weber’s length of thorax 2.92 mm. Differs from the
Osantomachus alethoides sp. n., female (holotype). Fig. 1: Head in full-face view. Fig. 2: Mandible in dorsal view. Fig. 3: Apical fork of mandible in frontal view. Fig. 4: Petiole in sideview. (Kempf det.).

holotype in the ensuing details: Semicircular costae on pronotal dorsum terminating not on anterior border of scutum but on postero-lateral lobe of pronotum; longitudinal costae on scutum sharper, the median smooth strip narrower; paraptera of scutellum with only 4 longitudinal costae, the median costa missing. Palpi 4, 3. Hairs: 1 long and erect hair on head laterad of each posterior ocellus; pronotal dorsum with long curved hairs; a similar pilosity, somewhat shorter, on scutellum. Short, appressed hairs on gaster, somewhat longer than their intervals.

Reference