

SI-Scape index = $SL \times 100 / HW$, PW-Pronotum width, AL-Abitrunk length, ED-Maximum diameter of eye, ML-Mandible length, PNL-Petiolar node length, DPW-Dorsal petiole width, PH-Petiole height, PNI-Petiolar node index = $DPW \times 100 / PW$, LPI-Lateral petiolar index = $PNL \times 100 / PH$. All measurements are expressed in millimeters.

The type specimens are deposited in the Insect Collection, Southwest Forestry College, Kunming, Yunnan Province, P. R. China.

Genus *Ponera* Latreille

Ponera Latreille, 1804, *Nouv. Dict. Hist. Nat.*, 24, 179. Type-species; *Formica coarctata* Latreille, by subsequent designation of Westwood, 1840, 83.

Diagnosis of worker : Small to medium size ponerine ants ; head width ranging about 0.30 mm~0.85 mm. Head longer than broad, roughly rectangular in frontal view, sometimes prismatic behind. Mandibles triangular, with 3 enlarged apical teeth followed by a series of small to minute, more or less regular denticles; several of these occasionally enlarged. No basal mandibular pit or groove. Palpal formula; Maxillary 2; Labial 2. Clypeus simple, often produced anteriorly, or with a raised tumosity or distinct tooth on the middle of its anterodorsal face. Eyes small, with 1~15, usually very indistinct, facets; situated about 0.75 - 0.90 \times the distance from lateral occipital border to midpoint of anterior genal border. Scaepes seldom exceeding median occipital border, their apices usually approximately contiguous with it, or falling to reach it by up to twice their maximum thickness. Funiculus incrassate, apical segment subequal in length to the two preceding together; an indistinct to distinct 4- or 5-segmented club often present. Mesosoma elongate, sides more or less parallel, dorsal profile usually flat. Posterolateral edges of propodeum sometimes marginate, forming angles of about 70°-90° when view from above. Mesometanotal and lateral mesonotal sutures may be present. Mesepisternum not divided by a horizontal suture. Middle and posterior tibiae each with a single pectinate apical spur; middle tarsi lacking setose bristles on their outer surfaces. Petiolar node massive; relatively thick in side view, usually tapering only slightly dorsally; see from above, its anterior face more or less semi-circular, the posterior one transverse, weakly concave to feebly convex. Dorsal and posterior faces of node forming a single arched surface, or with junction between them obtusely marginate. Edge between anterolateral, and posterodorsal faces of node rounded or marginate. Subpetiolar process highly characteristic; usually shallow; with a rounded or bluntly angled anteroventral corner, and a more or less distinctly angular posteroventral one. Latter composed of 2 separate, small to large, right-angled to acute teeth, situated side by side, and sometimes inclined posterolaterally. Anteriorly, subpetiolar process with a more or less distinct circular or oval thin-spot, or fenestra, visible in transmitted light. (Taylor, 1967)

Key to the known species of *Ponera* based on worker caste

1. Mandible with 5 subequal large teeth (Figs. 1~3) (Yunnan Province) *P. pentodontos*, sp. nov.
- Mandible with 3 enlarged apical teeth followed by a series of small to minute denticles 2
2. In profile view dorsal and posterior faces of petiolar node formed a single arched surface 3
- In profile view dorsal and posterior faces of petiolar node formed an obtuse to right angle 4