

MEASUREMENTS AND INDICES

The following measurements and indices derived from them are used:

Total length (TL): sum of axial lengths of body tagmata, including head and closed mandibles, but not extruded parts of sting.

Head length (HL): maximum length of head, frontal view, from occipital lobes to anterior clypeal border.

Head width (HW): maximum width of head, frontal view.

Cephalic index (CI): $HW \times 100/HL$.

Mandibular extension (ML): longitudinal axial distance from level of anterior-most point of clypeus to apex of closed mandibles, with head in HL measuring position.

Mandibulo-cephalic index (MI): $ML \times 100/HL$.

Scape length (SL): Maximum distance from apex of scape to tip of its basal lobe.

Scape index (SI): $SL \times 100/HW$.

Pronotum width (PW): maximum width of pronotum, dorsal view.

Weber's length of mesosoma (WL): maximum diagonal distance, in lateral view, from anterior face of pronotum to inferior propodeal angle.

Dimensions of petiolar, postpetiolar, and gastric segments are given as maximum widths and midline (not necessarily maximum) lengths, measured in dorsal view. A stereomicroscope eyepiece ruler graduated to 0.01 mm was used at 100× magnification for all measurements, which are given in millimeters.

KEY TO THE INDO-AUSTRALIAN BASICEROTINI

(Workers)

This key, based partly on Brown and Kempf (1960), includes all known Old World basicerotine species.

1. Mandibles linear, their insertions remote, so that the masticatory borders cross or engage only near their apices (Fig. 1)(genus *Rhopalothrix* Mayr).....2
 - Mandibles triangular, their whole serially dentate masticatory borders engaging directly at full closure (Figs. 6, 9, 12)(genus *Eurhopalothrix* Brown & Kempf).....3
- 2 (1). Specialized large hairs on cephalic dorsum numbering 16, with 8 in anterior row (Fig. 1); hairs on disc of first gastric tergite falling into one size class (Fig. 3); mesosomal dorsum with a distinct transverse metanotal impression, the propodeal dorsum forming a transverse tumosity behind it; propodeal teeth well developed, forming angles of about 90° in side view (Fig. 2) (Queensland)*R. orbis*, sp. nov.
 - Eighteen specialized hairs on cephalic dorsum, with 10 in anterior row; hairs of first gastric tergite falling into two size classes (Fig. 4); metanotal impression feeble, propodeal dorsum sloping abruptly back towards declivity; propodeal teeth reduced to obtuse vestiges (Fig. 5) (N.E. New Guinea)*R. diadema* Brown & Kempf
- 3 (1). Mandibles with a broad, low, basal tooth, approximately twice as wide at base as the succeeding teeth (Fig. 11); erect clavate hairs (excepting those on gastric apex) restricted to a single pair on verticoccpit; HW 0.72–0.89 mm (Ysabel and Vella Lavella, Solomon Is.)*E. isabellae* (Mann)
 - Mandibular teeth conical, subequal in size throughout; erect clavate hairs usually not distributed as above; size frequently different4
- 4 (3). Smaller species, HW < 0.75 mm(*brevicornis* group).....5
 - Larger species, HW > 0.93 mm(*procera* group).....10