



Fig. 7: *Meranoplus beatoni* sp.n., holotype worker, gaster, dorsal view, see description for dimensions.



Fig. 8: *Meranoplus beatoni* sp.n., holotype worker, dorsal view, see description for dimensions.

Remarks: Named for my long-time friend and colleague Colin D. Beaton. Together we published the first-ever SEMicrographs used for formal illustrations in insect taxonomy (TAYLOR & BEATON 1970), subsequently producing many more (those here probably the last, following the progress of digital photographic technology). We recently together developed the inexpensive EFI equipment used for the first time to illustrate this paper.

***Meranoplus schoedli* sp.n.** (Figs. 9 - 12)

Material examined and distribution: Known only from the type locality. Holotype and 18 paratypes, all workers. Australia: N.E. Queensland: Bruce Highway, N Slope of Mt. Ossa, 20° 58' S, 149° 49' E, 28.XI.1976, leg R.J. Kohout (ANIC: holotype – No. 32-029201 and 9 mounted paratypes). Other mounted paratypes in: Australian Museum, Sydney; Los Angeles County Museum, California, USA; Museum d'Histoire Naturelle, Geneva, Switzerland; Museum of Comparative Zoology, Harvard University,



Fig. 9: *Meranoplus schoedli* sp.n., holotype worker, dorsal view, see description for dimensions.

Cambridge, Massachusetts, USA; Natural History Museum, London, U.K.; Naturhistorisches Museum, Vienna, Austria; Queensland Museum, Brisbane; South Australian Museum, Adelaide.

Description of worker: The smallest mounted paratype (determined by HW) and the holotype (the largest specimen) have the following dimensions. HW 0.86, 0.90; HWE 1.00, 1.05; HL 0.78, 0.87; CI 110, 103; EL 0.17, 0.19; OI 20, 21; SL c. 0.64, 0.67; SI 74, 74; PSW 1.44, 1.56; PSL 1.19, 1.23; PSI 121, 127; GW 1.21, 1.26. The holotype (Fig. 9) and illustrated paratype (Figs. 10 - 12) both have HW 0.92.

General features as illustrated. Very distinctive from, but readily comparable with *M. hirsutus*. Promesonotal shield differences considerable, as illustrated, but with all major homologous structures, marginal extensions, fenestrae etc., readily identifiable (cf. Figs. 1 - 4 and 9 - 12). General features otherwise much as in *M. hirsutus*, notably the structure and sculpturation of the petiole and postpetiole, which are more massive in *M. schoedli* sp.n., with the postpetiolar sculpturing very superficial, essentially vestigial. Cephalic sculpturing less strongly-developed than in *M. hirsutus* and less reticulate, with fewer transverse elements between the longitudinal ribs. Promesonotal shield of basically similar configuration, differing from *M. hirsutus* as illustrated; generally smooth and strongly shining, with very superficial, vestigial reticulation; the posterolateral fenestrae closed by thin bars of thicker cuticle. Promesonotal dorsum strongly transversely arched in frontal view, quite different from that of *M. hirsutus* (cf. Figs. 2, 11). Gastral dorsum smooth and strongly shining, hair-pits less distinct than in *M. hirsutus*. Strongly hirsute, the hairs more flexuous, generally shorter, finer and slightly less abundant than in *M. hirsutus*. Uniformly dark reddish-brown as illustrated.

Diagnosis: No other known *Meranoplus* species except the bizarre and very different northwestern Australian *M. testudineus* MCAREAVEY, 1956 (and similar undescribed species), has such an extended and lightly sculptured promesonotal shield.

Remarks: *Meranoplus schoedli* sp.n. is sympatric at its type locality with *M. hirsutus*. The types are from a collection vial which included workers of both species (18 *M. schoedli* sp.n. and 60 *M. hirsutus*). They were presumably collected foraging on vegetation in rainforest.