Leptothorax renateae sp. nov. (Figs 4-7)

Type Locality

QUEENSLAND: 11 km ENE of Mt Tozer (12°43'S, 143°18'E).

MATERIAL EXAMINED AND DISTRIBUTION

Known only from north Queensland (grid cells 12/ 143, 16/145): Mt Tozer area (distances and bearings from Mt Tozer): type locality, holotype worker, paratype worker (T. Weir, 11-16 July 1986, rainforest litter, ANIC berlesate 1064); same data but 3 km ENE, 12°44'S, 143°14'E, paratype worker (1-4 July 1986, ANIC berlesate 1052). Iron Range, E Claudie River, 20 m, dealate female (G. Monteith, 6 Dec. 1985, rainforest, stick brushing, QM berlesate 694). Cape Tribulation area (distances and bearings from the Cape, all coll. Monteith, Yeates and Thompson, 1982, rainforest pyrethrum knockdown samples): 2.0 km WNW (site 2), 7 Oct., 50 m, 2 paratype workers; 3.5 km W (site 7), 2 Oct., 680 m, dealate female; 4.5 km W (site 9), 2 Sep., 760 m, dealate female. Cape Tribulation area, 16°03' to 16°05'S, 145°28'E, littoral rainforest, paratype worker (A. Calder and T. Weir, 21-28 Mar. 1984, ANIC berlesate 940). Mossman Gorge, 3 mi E of Mossman, rainforest, paratype worker, c. 200 ft (R.W. Taylor acc.1966.90, 27-29 X.). All worker specimens except holotype designated paratypes; the females are only provisionally identified, and are not designated as paratypes. Holotype, most paratypes, and females, in ANIC (type No. 7773), worker paratypes in BM(NH), QM. Holotype gold-coated for scanning electron microscopy, mounted with a colour-matched paratype.

ETYMOLOGY

Named with gratitude for my assistant Renate Sadler.

WORKER

Dimensions (mm) of the smallest paratype (Cape Tribulation) and the holotype (the largest type) are: TL c. 3.4, 3.6; HL 0.74, 0.77; HW 0.63, 0.71; CI 86, 92; SL 0.57, 0.57; SI 90, 80; PW 0.49, 0.52; AL 0.97, 1.10. General features as in Figs 4-7. Very similar to L. australis, and agreeing in general with its original description, with the following differences: (1) Faint vestiges of frontal carinae present on head, extending back from posterior extremities of frontal lobes to slightly beyond level of posterior margins of eyes; each carina is essentially a minutely raised element of the longitudinal sculpturing, and is usually better developed posteriorly than in its medial section. There are no traces of such structures in L. australis, and they are more distinct in southern than northern specimens of L. renateae. (2) Pronotal humeri evenly rounded in dorsal view,

versus epaulate in L. australis. (3) Propodeal spines 1.3-1.5 times longer than the distance separating their bases, versus about as long as that distance in L. australis. (4) Petiolar node in dorsal view distinctly longer than wide, versus slightly wider than long in L. australis. (5) Lateral mesonotal projections larger and more prominent. (6) Pilosity consisting of moderately long tapered hairs with narrowly acute apices, relatively about 1.5-2 times as long as those of L. australis, which has untapered, blunt, minutely clubbed hairs. Mandibular dentition and suborbital carinae much as in L. australis. Southern specimens tend to be smaller, with proportionately narrow heads and long scapes.

FEMALE

The females listed above are only slightly larger than the workers, and agree with them in the same features noted above for *L. australis*. Frontal carinae as in worker; petiolar node in dorsal view relatively slightly longer proportional to its width. The mesosoma relatively bulky in the Iron Range specimen.

KEY TO AUSTRALASIAN LEPTOTHORAX SPECIES (WORKERS AND FEMALES)

ACKNOWLEDGEMENTS

The cooperation of Rev. B.B. Lowery SJ, Rudolf Kohout, Dr G.B. Monteith and Barry Bolton is gratefully acknowledged. Colin Beaton assisted with the preparation of the figures.