

## NORTH QUEENSLAND NATURALIST

have come into contact, as they may do, for instance after an ice-age. There will not necessarily be any sharp environmental discontinuity along the line where they meet, which could ensure that the types adjusted to one region will be eliminated owing to their inappropriateness in the other. Yet, in such circumstances two sub-species may maintain their identity unimpaired, and produce a hybrid population only along a relatively narrow belt between them. It may well be asked why they do not turn into a cline once they can interbreed and the genes from one sub-species can flow freely over into the other. It is not hard to answer this question. The two

sub-species, having arisen in isolation, will have been adjusted independently to their environments where they will have evolved a distinct genetic constitution adapted to their particular needs and in which each will have built up a gene complex, balanced to give harmonious working. When the two meet and interbreed such a balance will be upset in the hybrids, which will therefore be at a disadvantage when compared with either of the selected types. Consequently, though such types will constantly be produced by crossing, they will be as constantly eliminated by selection and prevented from spreading far beyond the narrow belt where they are formed."

Notes On Australian *Podomyrma* 46

## (Hymenoptera: Formicidae)

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The ant described as *Podomyrma parva* by Crawley (1925, Ann. Mag. Nat. Hist. (9) 16: 592-593, worker) is a NEW SYNONYM of *Podomyrma elongata* Forel (1895, Ann. Soc. Ent. Belg. 39: 428, worker). Specimens collected and determined by J. Clark, original collector, compare satisfactorily with Forel's description of *P. elongata* (allowances made for the usual metric discrepancy) and with eastern Australian series of the latter. Series were examined from Western Australia: Armadale (J. Clark), Pemberton (W. M. Wheeler). South Australia: Lucindale (Feuerheerd), Adelaide (Wheeler). Victoria: Heathcote (W. L. Brown). Australian Capital Territory: several localities near Canberra (T. Greaves), Blundell's Creek (Wheeler). The colour varies inter- and intranidally from reddish-tan to blackish-brown, with the ali-trunk often lighter than head and gaster. According to Forel, *P. elongata* ranges northward in Queensland to Atherton.

*Podomyrma grossestriata* Forel

(NEW STATUS) was described originally as a subspecies of *P. elongata* (Forel, 1915, Ark. f. Zool. 9 (16): 50, worker), but should now be regarded as an independent species. Two specimens from the Cairns district (A. M. Lea), before me resemble *elongata*, but have broader heads, shorter petioles, and very coarse, well-spaced costulate sculpture, in these features agreeing with Forel's description of the subspecies. The differences are very clearcut, and the two species may be sympatric in parts of the Atherton Tableland. Known localities for the two species are only a few miles apart in this area. *P. elongata* and the much more common *P. adelaidae* of Frederick Smith (*P. bimaculata* Forel) nest by preference in the galleries of small borers made in sound wood of living and dead trees, usually in woodlands of the moderate to low rainfall types. *P. adelaidae* is found even in very arid parts of South Australia, where it frequents the red gums (*Eucalyptus camaldulensis*) along the dry creek beds.