

## Taxonomic Notes on the Ants *Ponera leae* Forel and *Ponera norfolkensis* (Wheeler) (Hymenoptera—Formicidae)

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THE RECENT RECOGNITION by Wilson (1957) of several Pacific species groups within the ant genus *Ponera* has done much to clarify the relationships, both taxonomic and biogeographical, of various scarce species occurring in this area. The present note has been prepared in order to record the addition of two further species to Wilson's *Ponera tenuis* group: these are *P. leae* Forel of Tasmania, and *P. norfolkensis* (Wheeler) of Norfolk Island. The recognition of the true position of these species has resulted from studies directed towards the identification of specimens of *P. leae* collected several years ago at Paihia, New Zealand, by Dr. K. P. Lamb of the Plant Diseases Division, Auckland. Further notes on the biology of *P. leae* in New Zealand will be presented elsewhere; at present it is sufficient to point out that this ant has almost certainly been introduced into that country from Tasmania, or from some other part of Australia.

Since this work is largely additional to that of Wilson (*loc. cit.*) I have used his descriptions as a basis in preparing the measurements, indices, and terminology used below.

### *Ponera leae* Forel

*Ponera leae* Forel, 1913, Bull. Soc. Vaud. Sci. Nat. 49: 173–196; p. 175, worker, original description.

TYPE LOCALITY: Tasmania.

The following measurements and notes are based upon the holotype worker in the Museum d'Histoire Naturelle, Geneva; and on two workers from Paihia, New Zealand, in the collection of the Plant Diseases Division, Auckland.

HOLOTYPE WORKER: HW 0.40 mm., HL 0.55 mm., SL 0.35 mm., CI 73, SI 87.5, PW 0.30 mm., PH 0.29 mm., petiolar node length 0.21 mm., dorsal petiole width 0.25 mm.

HOMOEOTYPE WORKERS: HW 0.40 mm., HL 0.55 mm., SL 0.34 mm., CI 73, SI 85, PW 0.30 mm., PH 0.29 mm., petiolar node length 0.21 mm., dorsal petiole width 0.25 mm.

Length 2.5 mm. Mandibles with three well-developed teeth occupying approximately the apical third of the masticatory border, and with an indeterminate number of minute denticles behind. Eyes minute, consisting of a single facet with a maximum diameter of about 0.01 mm. Antennal club massive, distinctly four jointed, considerably longer than the remainder of the funiculus. Petiolar node (Fig. 1) in side view massive, subrectangular, tapering slightly dorsally; seen from above its dorsal surface forming an almost complete half-circle, the posterior face flat to very feebly concave. Subpetiolar process somewhat reduced, with a large and distinct anterior fenestra. Other characters as described by Forel (1913).

Forel (1913) considered that eyes were not developed in this species, and Wheeler (1927) noted that pigment spots were present in some specimens, while others showed no sign of eyes. It is clear that Forel overlooked the eyes which I have shown to be present in his type of *leae*; and in view of the minute size of these it is probable that Wheeler was also in error in his interpretation of the material he examined. However, Wheeler's observation must stand, with reservation, until further material becomes available, as the specimens examined by him have apparently been lost, and so cannot be checked.

RELATIONSHIPS: This species is clearly very closely related to *P. caledonica* Wilson, but differs in the following characters:

(1) The eye of *leae* is somewhat smaller; with a maximum diameter of only about 0.01 mm., as compared with 0.02 to 0.03 mm. in *caledonica*.

(2) The lateral faces of the propodeum are much more densely shagreened, with extremely

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