

THE AUSTRALIAN ANTS OF THE *POLYRHACHIS RELUCENS* SPECIES-GROUP
(HYMENOPTERA: FORMICIDAE: FORMICINAE)

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The Australian ants of the *Polyrhachis relucens* species-group, traditionally placed in the subgenus *Myrma* Billberg, are reviewed. Four species are recorded, including *Polyrhachis andromache* Roger, 1863, and *Polyrhachis rufofemorata* Fr.Smith, 1859, and two, *P. inusitata* and *P. foreli*, which are described as new. A key to species is provided, and all are illustrated. Notes on distribution and nesting habits are included.

□ *Formicidae, Polyrhachis, relucens-group, Australia, systematics.*

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Four species of the *Polyrhachis relucens* species-group are recorded from Australia, two of which are described as new. The ants of this group are traditionally assigned to the subgenus *Myrma* Billberg and can be characterised by the following combination of characters:

1. Dorsum of mesosoma convex in profile; lateral margins distinct, with margination interrupted only at the sutures.
2. Pronotum armed with a pair of relatively long, straight, more or less anteriorly-directed spines.
3. Propodeum either unarmed or with tubercles or small teeth.
4. Promesonotal suture and propodeal groove distinct.
5. Petiole scale-like, usually armed with a pair of dorsal spines or denticles, each with a laterally oriented tooth or blunt angle below its base.
6. First gastral tergite basally truncated or shallowly concave.
7. Anterior clypeal margin arcuate, often bluntly truncated medially.
8. Mandibles at their bases finely longitudinally striate.
9. Frontal carinae forming sharply raised, lamellate flanges; the area between them relatively narrow.

The illustrations were prepared using a Zeiss (Oberkochen) SR Stereomicroscope and camera lucida. All depict the primary types, except those of the geographically variable *P. rufofemorata* Fr.Smith, where a typical Australian specimen, characterised by gracile stature and spinose petiole, is illustrated. The measurements (in mm) and indices are those of Kohout (1988a). The abbreviations for institutions and depositories are as used by Taylor and Brown (1985) and Kohout (1988a). Some distribution records are cited using

1-degree coordinates, following Taylor (1987). Most of the specimens studied are lodged in the ANIC, QM and RJK collections.

***Polyrhachis andromache* Roger, 1863**
(Figs 1, 1a, 6, 10)

Polyrhachis Hector Fr.Smith, 1859:142. Holotype worker. INDONESIA: Aru I.(A.R.Wallace), OUM (Examined). Nom. preocc. Junior homonym of *Polyrhachis Hector* Fr.Smith, 1857.

Polyrhachis andromache Roger, 1863:8, 46. Replacement name.

Full reference citations with synonymy are given by Kohout (1988b) and are not repeated here.

DIMENSIONS OF HOLOTYPE

TL 8.82; HL 2.32; HW 1.81; CI 78; SL 2.82; SI 156; PW 1.21; MTL 2.82.

ADDITIONAL MATERIAL EXAMINED

NEW GUINEA: Ighibirei, vii-viii 1890, L.Loria. PAPUA NEW GUINEA: Eastern Highlands Prov., Kratke Ra., Mt Piora, 12 June 1966, O.R. Wilkies. Northern Prov., Popondetta, 15 i 1971, B.B.Lowery; Oro Bay, 30mi S of Popondetta, 14 i 1971, B.B.Lowery. Western Prov., Middle Morehead Riv., 08.50 S x 141.30 E, August 1967, R.Pullen. AUSTRALIA: Queensland, Torres Strait, Badu I., 18 ii 1984, J.H.Sedlacek. Cape York Penins., Bamaga, 21 i-12 ii 1984, J.H.Sedlacek; 10.53 S x 142.23 E, 18-24 March 1987, RJK acc. 87.5. Lockerbie Scrub, January 1975, G.B.Monteith; xii 1983, J.H.Sedlacek; 9-11 xii 1986, J.Gallon; 10.46 S x 142.29 E, 19-23 March 1987, RJK acc. 87.19, 25, 49, 59, 73. Iron Range, 1-3 vii 1976, P.Filewood; 1-17 vii 1978, S.van Dyck; 12.43 S x 143.18 E, 26-31 July 1981, RJK acc. 81.130, 166, 194, 197, 214, 215; 17 iii 1984, J.Sedlacek. West Claudie Riv., 3-10 xii 1985, G.B.Monteith and D.Cook; East Claudie Riv., 6 xii 1985, G.B.Monteith and D.Cook.