Acropyga Roger

Acropyga acutiventris Roger

Acropyga acutiventris Roger, 1862: 243.
Acropyga moluccana australis Forel, 1902: 477. Syn.n.

The Indo-Australian *Acropyga acutiventris* species group (*Acropyga* subgenus *Acropyga* of authors) includes *A. acutiventris* Roger (type locality: Ceylon), *A. moluccana* Mayr (Ceram, Indonesia) and *A. crassicornis* Emery (New Guinea) (Emery 1925). Several subspecies and varieties were listed by Emery (1925) under *acutiventris* and *moluccana*, and others have been described since (see Chapman and Capco 1951). The Australian *A. moluccana australis* Forel, 1902 (type locality: Mackay (21/149), Qld) was considered a subspecies of *A. acutiventris* by Forel (1911) and Emery (1925).

ANIC holdings from India, West Malaysia, Singapore, Sarawak, Sabah, Sumatra, Rakata I. (= Krakatau), New Guinea and northern Australia imply that the *acutiventris* "group" comprises a single, widespread, somewhat variable species, and that most relevant names proposed after 1862 (with the possible exception of *crassicornis*) are probably junior synonyms of *acutiventris*. Names other than *australis* are not formally synonymised here; that would be beyond the scope of this study, and type specimens apart from those of *australis* (syntypes, ANIC) have not been examined.

The wide-ranging conspecificity inferred among these nominal taxa gains support from recent observations that the inquiline, subterranean, root-feeding homopteran *Xenococcus annandalei* Silvestri (Hemiptera: Pseudococcidae) is found in the nests of "*A. acutiventris*" throughout much of its geographical range. This presumably mutualistic association has been recorded from India, West Malaysia, Vietnam, Hong Kong, the East and West Sepik districts of Papua New Guinea, and northern Australia (Williams 1978; 1985; Williams and Watson 1988).

ANIC specimens of *A. acutiventris* and *X. annandalei* collected together, and supplied to Williams, have considerably extended the known geographical distribution of this association, which includes Australian localities indicated * in the list of *acutiventris* records given below. These reports have mostly been based on specimens of *X. annandalei* collected inadvertently into liquid preservative with targeted ants, and later extracted from the ANIC formicid spirit collection. *X. annandalei* probably occurs throughout the range of *A. acutiventris* and has been recorded only from *A. acutiventris* nests or being transported by flying *A. acutiventris* queens.

Living, gravid females of *X. annandalei* are known (from ANIC specimens) to be carried in the jaws of *A. acutiventris* queens during nuptial flight, in order apparently to establish the symbiotic association in founding colonies. Neither species is known to maintain such relationships with other equivalent insects, though nuptial-flight dispersal of pseudococcids is probably frequent in *Acropyga* (Hölldobler and Wilson 1990), and could be universal among its species.

A. acutiventris is widely distributed in northern Australia, as follows (ANIC records; associations with *X. annandalei* indicated *): NORTHERN TERRITORY: Baroalba Spring* (12/132). QUEENSLAND: Darnley I. (09/143); Wyer I., Maer I. (09/144); Iron Range*, Lamond Hill, Tozers Gap (12/143); Cape Tribulation, Mossman Gorge, Yarrabah Mission (16/145); Chillagoe (17/144); Josephine Falls*, The Boulders Park, Upper Mulgrave River, Waugh Pocket* (17/145); Mission Beach (17/146); Missionary Bay (Hinchinbrook I.)* (18/146); Finch Hatton Gorge* (21/148); Mackay (21/149). (Collectors: J. E. Feehan, H. Heatwole, BBL, GBM, RWT, W. Taylor, TAW).

In the Cairns District *A. acutiventris* is readily collected at low altitudes (below about 300 m or 1000 ft). It has never been taken, to my knowledge, at higher elevations on the Atherton Tableland, and could be excluded there by low winter temperatures. In this regard its local distribution is like that of the weaver or "green tree" ant, *Oecophylla smaragdina* (F.), and the 2 species appear likely to have similar overall ranges in Australia (for distribution of *O. smaragdina* see Lokkers 1986).