An E. turneri worker was collected sympatrically with E. australis at Crystal Creek by BBL, and other sympatric associations are implied when the above list and that for E. turneri (following) are compared.

## Echinopla turneri Forel

Echinopla turneri Forel, 1901: 76. Echinopla turneri picticeps Forel, 1901. Syn.n.

There is no evident justification for separate recognition of *E. turneri* and *E. picticeps* when their types and other specimens are compared. Distinction of *E. turneri* from *E. australis* is discussed above. The 2 appear to have similar nesting habits, habitat preferences and distribution. The ANIC has Papua New Guinean specimens which resemble Australian *E. turneri* material. They have more dense pubescence and, in some series, different sculpturation. They could constitute one or more sibling species, or might represent *turneri* as a widespread and substantially variable species.

Australian records are from QUEENSLAND: Crystal Creek N.P. (18/146), stray worker, collected with E. australis (see listing above); various records from Mt Elliott N.P., near Giru (19/147), all of the colonies collected from dead twigs on vegetation in gallery rain forest by BBL (specific localities and dates are: Pangola Park, 30.v.1980; Ridge above Margaret Creek, 9.vi.1981 (2 colonies); Margaret Creek, 3.xii.1980) (3 colonies); Cedar Creek Falls, 15 km SE of Proserpine (20/148) (colony in dead twig gallery rain forest, BBL, 14.ii.1980); 10 km N of Koumala (21/149) (foragers on vines, gallery rain forest, 4 pm, BBL, 12.ii.1980); Byfield (23/150), near Yeppoon (strays, rain forest edge, RWT and TAW, 26.x.1976).

It is of interest that all of the colony series of both *Echinopla* species listed above contain advanced larvae and cocoon-enclosed pupae, despite the seasonally wide range of collection times (which comprise dates in early January, February, March, May, June and September). Alate queens and males are present only in the 2 *E. turneri* colonies collected at Margaret Creek (19/147) on 3.xii.1980. These both contain large larvae and pupae, and are also the only colonies with eggs or hatchling larvae. Callow workers are present in several samples, implying that adult worker production might be essentially continuous in these ants.

One of three December 1980 Margaret Creek turneri colony series, which I judge to be slightly the largest I have seen for either species, contained at collection a dealate queen, 98 workers, 30 alate queens and 22 males. The presence of alates implies that this must be a mature colony, and, assuming that E. turneri nests are not polydomous, probably close to maximum size, apart from foragers absent at the time of collection. Mating flights presumably occur in mid- to late summer.

## **Notoncus** Emery

W. L. Brown (1955) recognised 5 "good" species in Notoncus where 17 names of the species group had been previously used. His classification is satisfactory except for the synonymy of N. capitatus Forel under N. enormis Szabó. These are clearly separate species, and Notoncus capitatus is reinstated here to specific rank. It retains the junior synonyms indicated by Brown (1955: 489) (i.e. N. mjobergi Forel and N. capitatus minor Viehmeyer). Some of the nominal species recognised by Brown might be composite, but his arrangement is a great advance on the past. I have examined a syntype of N. capitatus (Tamborine Mt (27/153), Qld; ANIC, donated by MHNG), and 3 putative worker syntypes of N. enormis (Mt Victoria (33/150), N.S.W.) (these are not labelled as types, but have appropriate data labels, and were sent from the HNHM following request for type specimens on loan). The ANIC has 3 closely matching, syntype-compared workers of N. enormis from Springwood (33/150), N.S.W. (E. Kearney, 2.iv.1965), which were taken under a sandstone rock at the base of a tree on a well-wooded ridge, in an area where Aphaenogaster longiceps (Fr. Smith) was common. A colony series of about 50 workers and numerous large larvae was taken in a soil pocket at the base of a *Eucalyptus* tree in wet sclerophyll forest at Bulahdelah Mt, 8 km W of Bulahdelah (32/152), N.S.W., by BBL, 8.ix.1977. A