

SUBFAMILY DOLICHODERINAE

Iridomyrmex cordatus (Fr. Smith)

Records: Hutuna (Brit. Exp.), winged queen; Lavanggu (Dan. Exp. L372); worker from rain forest; Te-Uhungango (Brit. Exp.), winged queens.

I. cordatus as presently conceived includes *I. myrmecodiae* Emery. The species is, next to *I. anceps* (Roger), the most widespread of the Old World *Iridomyrmex*. It occurs continuously from the tropical mainland of Asia to Queensland and east through the Santa Cruz Islands. The worker and queen castes show considerable geographic variation in several characters, including size, extent of polymorphism, and coloration. The single worker and small series of queens from Rennell resemble exactly the small, bicolorous form that makes up most of the Solomons and Santa Cruz populations.

Turneria dahli Forel

Record: Hutuna (Brit. Exp.), a single winged queen. The single individual presents a puzzling array of characters that seem to place it intermediately between *dahli* Forel and *pacifica* Mann but somewhat closer to the former species. It has been compared with queens of *dahli* from New Britain and *pacifica* from the New Hebrides (Espiritu Santo). These two samples differ as follows: (1) *dahli* has a somewhat more elongate head, with more acute occipital angles; (2) *dahli* has at most one or two standing pairs on the sides of the head posterior to the eyes, whereas *pacifica* has numerous standing hairs in these areas; (3) in *dahli* vein R_s+4 is distinctly longer than the second radial crossvein, while in *pacifica* the two veins are equal in length; (4) *dahli* is concolorous dark brown, while in *pacifica* the gaster alone is dark brown, with the remainder of the body yellowish red. From collections recently acquired from several sources, it is now known that *dahli* occurs from New Britain to Espiritu Santo, and *pacifica* occurs from Santa Cruz to Espiritu Santo. Thus the two species are sympatric through the entire known range of *pacifica*. The Rennell specimen resembles *dahli* in characters (3) and (4) and *pacifica* in (2). It has the elongate head shape of *dahli* but more rounded occipital corners approaching the condition of *pacifica*; thus in head shape it is somewhat closer to the New Britain *dahli* but in this respect is closely approached by *dahli* workers (no queens available) from Espiritu Santo. These morphological considerations, plus the fact that *dahli* is the most wide-ranging of all *Turneria*, have led to the present tentative determination of the Rennell specimen. It is interesting that no *Turneria* have yet been collected from the main part of the Solomon Islands, although the genus almost certainly occurs there. It is evidently rare throughout most of its range, but on Espiritu Santo the author found *dahli* and *pacifica* to be among the dominant arboreal ants. A principal factor responsible for the unexpected success of the genus in the New Hebrides appears to be the lack of competitors found elsewhere in Melanesia, e. g., the genus *Iridomyrmex*.