

Species Complexes of the *I. calvus* Group

Members of the *I. calvus* group form three distinct sets of species, referred to here as the *calvus*, *rufoinclinus* and *viridigaster* complexes. The diagnosis and composition of these complexes are as follows (for definitions of abbreviations, see 'Methods and Abbreviations' below).

calvus complex: petiole strongly inclined anteriorly but with a distinct anterior face (Fig. 11); propodeum generally expanded dorsally into a uniform convex arch (Figs 9, 11), occasionally lower (Fig. 7); overall body size generally smaller than in other complexes (HW < 1.13 mm, SL < 1.02 mm (Fig. 5), PnL + ML + PpL < 1.75 mm, HTL < 1.29 mm). Small to medium, yellowish or brownish species of wetter habitats in southern Australia, Norfolk Island, Lord Howe Island and New Caledonia. Included taxa: *I. albitarsus*, *I. argutus*, *I. calvus*, *I. mimulus*, *I. notialis*, *I. obsidianus*, *I. occiduus*, *I. prismatis*.

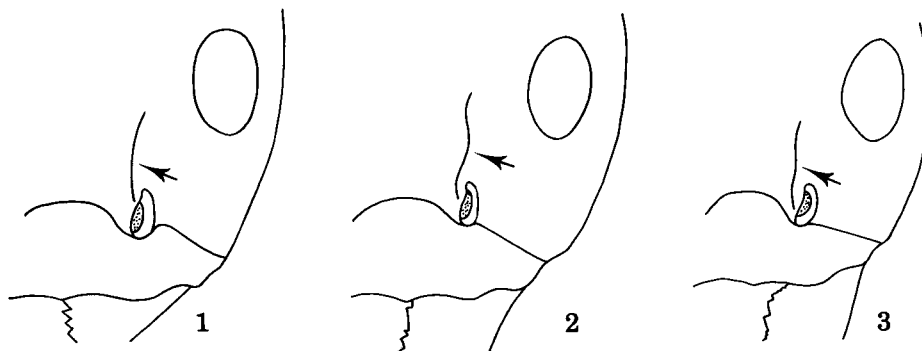
rufoinclinus complex: petiole strongly inclined anteriorly and with the anterior face reduced and sometimes essentially absent (Fig. 29); propodeum generally low and often with the mid-dorsal region approximately flat (Figs 31, 33), higher and rounded in one taxon (Fig. 29); central projection of anterior clypeal margin even with, or more commonly anterior to, an imaginary line drawn between the anterior-most points of the medio-lateral convexities; posterior and lateral surfaces of head (in full face view) with erect hairs; gula and dorsum of mesosoma and petiole with elongate erect hairs; legs with elongate erect hairs present on all surfaces of femora and tibiae; overall body size generally larger than in the *calvus* complex (HW > 1.04 mm, SL > 0.90 mm (Fig. 5), PnL + ML + PpL > 1.75 mm, HTL > 1.30 mm). Large, reddish species of open habitats in northern Australia. Included taxa: *I. anteroinclinus*, *I. cappoinclinus*, *I. cephaloinclinus*, *I. rufoinclinus*.

viridigaster complex: petiole moderately to strongly inclined anteriorly but with a distinct anterior face (Fig. 25); propodeum expanded dorsally into a uniform to weakly angular convex arch (Fig. 23); central projection of anterior clypeal margin posterior to an imaginary line, or less commonly even with a line, between the anterior-most points of the medio-lateral convexities; overall body size generally larger than in the *calvus* complex (HW > 1.07 mm (Fig. 5), PnL + ML + PpL > 1.80 mm, HTL > 1.30 mm). Medium to large, reddish species of the southern arid zone of Australia. Included taxa: *I. anderseni*, *I. hesperus*, *I. viridigaster*.

Methods and Abbreviations

Pilosity Characters

The presence or absence of erect or suberect hairs on the scapes and legs varies among the species within this group. In this study, the regions utilised to determine the presence of erect or suberect hairs



Figs 1-3. 1, Frontal carinae of *I. notialis* (Queanbeyan, N.S.W.) (*I. calvus* species-group); 2, Frontal carinae of *I. sp.* (Mt Gunson, SE. of Woomera, S.A.) (*I. discors* species-group); 3, Frontal carinae of *I. sp.* (Thomas R., 23 km NW. by W. of Mt Arid, W.A.) (*I. hartmeyer* species-group).