(A. M. and M. J. Douglas); 80 km E. of Jerramungup (PJMG); 8 miles SW. of Coolgardie (RWT); 90 km N. of Norseman (PJMG); 91 km W. of Mundrabilla (PJMG); 94 km W. of Coolgardie (PJMG); 96 km W. of Caiguna (PJMG); 9 km SE. of Ravensthorpe (PJMG); 9 miles W. of Kitchener (TG); Balladonia (TG); Booanya (A. E. Baesjou); Boyup Brook (PJMG); Bunbury (A. Snell); Caiguna (PJMG); Canning Reservoir, 11 km E. of Armadale, 32°09'S.,116°07'E. (T. A. Weir); Carnamah (E. F. Riek); Ceduna (K. Casparson); Cranbrook (PJMG); Denmark (E. Simmons); Eucla (TG); Gibson, 33°31'S.,121°43'E. (RWT); Great E. Hwy, 260 mile post (PJMG); Hill R. (E. F. Riek); Hyden (PJMG); Israelite Bay (TG); Jacup (E. F. Riek); Junana Rock, Cape Arid Natl Pk (A. N. Andersen); Kanowna (PJMG); Lake Grace (E. F. Kipps); Lort R., 44 miles W. of Esperance (TG); Mt Linden (T. F. Mosiston); Murchison R. (TG); Norseman (BBL); Northam (PJMG); Perenjori (PJMG); Perth (PJMG); Rainbow Canyon, Kalbarri Natl Pk (R. R. Snelling and J. Grey) (LACM); Red Gum Pass, Stirling Range Natl Pk (R. R. Snelling and J. Grey) (LACM); Red Gum Spring, Stirling Range Natl Pk (R. R. Snelling and J. Grey) (LACM); Stirling Range (E. F. Riek); Swan R. (J. Clark); Tammin (TG); Thomas R. (TG); Thomas R., 23 km NW. by W. of Mt Arid, 33°51'S., 123°00'E. (JEF); Toodyay (M. S. Upton); Yarri (PJMG); Yokinup Bay, Cape Arid Natl Pk (A. N. Andersen); nr Weebubbie Cave, nr Eucla (A. M. Richards).

Worker Diagnosis

Iridomyrmex greensladei, a member of the *purpureus* complex, is morphologically similar to *I. purpureus* but can be separated by having the head, pronotum and mesothorax similar in colour or with the head slightly darker than the pronotum and mesothorax (the head and pronotum are lighter than the mesothorax in *I. purpureus*). *Iridomyrmex greensladei* is also similar to lightly coloured individuals of *I. lividus*. In the majority of cases (especially with living or freshly collected material) they can be separated on the basis of the lighter reddish brown body colour found in *I. greensladei*. However, some collections may be difficult to determine with confidence (see also Diagnosis under *I. lividus*).

Description

Iridescence between compound eyes purple and/or blue and on lateral region of head (between compound eye and insertion of mandible) moderately developed purple. Pigment colour of mesosoma reddish brown; head same colour as the mesosoma; coxae and legs same colour or slightly darker than the mesosoma; petiole dark reddish brown; lateral region of second gastral tergite shiny and with weak green and/or weak purple iridescence. Head pilosity (in full face view) abundant on occipital margin, and with 2–4 pale setae near mandibular insertion. Ocelli absent. Ventrolateral pronotum with a few scattered setae. Mesosomal setae with dark pigment (sometimes translucent and appearing pale when viewed against a lightly coloured background). Pilosity on first gastral tergite abundant. Antero-dorsal region of propodeum flat to very weakly arched.

Measurements

Holotype. CI 0·99; EL 0·38; EW 0·22; HL 2·09; HW 2·06; ML 1·05; PnL 1·06; PpL 1·11; REL 0·18; SI 0·88; SL 1·81.

Worker (*n* = 30). CI 0·89–1·01; EL 0·33–0·39; EW 0·18–0·24; HL 1·69–2·24; HW 1·51–2·18; ML 0·76–1·15; PnL 0·87–1·17; PpL 0·81–1·14; REL 0·17–0·22; SI 0·86–1·05; SL 1·57–1·95.

Comments

There are three morphologically identifiable groups within *I. greensladei* as presently conceived. These variants are *I. greensladei* (strict sense), 'hairy', and 'pale-haired'. Each of these groups will be discussed, followed by justification for considering them to represent a single species.

Iridomyrmex greensladei (strict sense) is distributed from approximately Carnarvon, W.A., south and east to the Eyre Peninsula (Fig. 11) and includes the entire ranges of 'pale-haired' as well as the majority of the range of 'hairy'. *Iridomyrmex greensladei* (strict sense) is morphologically uniform over its entire distribution, showing only minimal and apparently random variation in size and pilosity. Colour, however, is slightly more variable. In the