(G. A. Holloway); Umberatana, Flinders Ranges (PJMG); Ungarra, Eyre Peninsula (PJMG); Waikerie (PJMG); Waitpinga (PJMG); Whyalla (TG); Wilpena Pound (PJMG; BBL); Wirrabara (PJMG and CAK); Yacka (PJMG and CAK); nr Verran, Eyre Peninsula (PJMG). Victoria: '37·11S 147·46E' (S. A. Harrington); '37·14S 146·6E' (S. A. Harrington); 10 miles NE. of Ararat (R. B. Halliday); 14.5 miles E. of Ararat (R. B. Halliday); 1 mile W. of Ararat (R. B. Halliday); 20 miles SW. of Horsham (R. B. Halliday); 2 miles SE. of Halls Gap (R. B. Halliday); 2 miles W. of Edenhope (R. B. Halliday); 48 km W. of Mildura (PJMG and R. B. Halliday); 5 km ESE. of Merbein (PJMG and J. A. Roberts); 5 miles SE. of Halls Gap (R. B. Halliday); Ararat (G.F.H.); Bannerton (A. C. Wilson); Bayswater (collector unknown); Beaumaris (TG); Bright (PJMG and R. B. Halliday; BBL); Cullulleraine, nr Mildura (PJMG and R. B. Halliday); Eltham (J. E. Dixon); Emerald (E. Jarvis); Greensborough (J. McAreavy); Halls Gap (T. Wilson); Healesville (H. A. Arnold) (LACM); Inglewood (collector unknown); Kilmore (collector unknown); L. Hattah (J. E. Dixon); Little Desert, 9 miles S. of Kiata (A. Musgrave); Melbourne (collector unknown); Mt Kuring (T. Wilson); Nhill (J. Searle); Nyah (Soudie; J. C. Boudie) (ANIC, LACM); Ovens Valley, 36°26'S.,146°34'E. (S. A. Harrington); Patho (H. A. Potter); Sea Lake (Goudie); Stawell (R. B. Halliday; J. A. Hill); Tallarook (F. G. Holdaway); Tamba Hwy, N. of Walnut, 37°14'S.,147°45'E. (S. A. Harrington); Wedderburn (E. F. Riek); Winiam (A. G. Campbell); Wyperfeld Natl Pk (E. S. Hanks).

Worker Diagnosis

A member of the *purpureus* complex with the head and pronotum similarly coloured and slightly lighter than the reddish brown mesothorax (occasionally with only the head lighter, the pronotum and mesothorax being similar in colour); and dark (but sometimes translucent) erect mesosomal setae.

Description

Iridescence between compound eyes and on lateral region of head (between compound eye and insertion of mandible) weak to strong purple. Pigment colour of mesosoma reddish to reddish brown; head and pronotum generally lighter than the mesothorax and propodeum (occasionally with pronotum and mesothorax similar in colour); coxae and legs slightly darker than the mesothorax; petiole reddish brown, slightly darker than the mesothorax; lateral region of second gastral tergite moderately shiny to shiny and with green/blue or green and purple iridescence. Head pilosity (in full face view) abundant on occipital margin, and with 3-8 pale setae near mandibular insertion. Ocelli absent. Ventrolateral pronotum with scattered erect setae. Mesosomal setae dark. Pilosity on first gastral tergite abundant. Anterodorsal region of propodeum flat to broadly arched.

Measurements

Worker (n = 53). CI 0·90-1·03; EL 0·33-0·42; EW 0·19-0·26; HL 1·79-2·31; HW 1·63-2·29; ML 0·86-1·26; PnL 0·89-1·22; PpL 0·87-1·26; REL 0·17-0·21; SI 0·87-1·04; SL 1·70-2·05.

Comments

Iridomyrmex purpureus is common and widespread in south-eastern Australia (Fig. 13), and its large and obvious mounds make it one of the most commonly collected species in the group.

The population from the McDonnell Ranges, N.T., is a disjunction from the normal range of *I. purpureus*. Collections have been made numerous times from several areas and the species seems firmly established in the area. This north-western population is similar to eastern populations in some characters (overall colour and dark erect setae) while it also shares characters with the geographically closer S.A. populations (reduced appressed pubescence on the lateroventral first gastral tergite).

The worker and queen of *I. purpureus* were described as separate species by Smith (1858), the worker as *Formica purpurea* and the queen as *Formica detecta*. Lowne (1865) recognised this and synonymised *F. detecta* under *F. purpurea*, thus choosing *purpurea* as the valid name for this taxon. This practice was followed by subsequent authors, including Emery (1888), Forel (1878) and Mayr (1862, 1870, 1876), but not by Dalla Torre (1893). Dalla Torre choose to use *I. detectus* for this species, rather than *I. purpureus*, and this practice