Measurements

Holotype. CI 1·03; EL 0·60; EW 0·33; HL 1·82; HW 1·88; ML 0·96; PnL 0·95; PpL 0·89; REL 0·32; SI 0·83; SL 1·56.

Worker ($n=10$). CI 0·94–1·05; EL 0·56–0·62; EW 0·28–0·34; HL 1·60–1·91; HW 1·50–1·96; ML 0·82–1·00; PnL 0·82–0·99; PpL 0·84–0·94; REL 0·30–0·37; SI 0·78–0·97; SL 1·46–1·54.

Comments

Iridomyrmex bigi and *I. variscapus* are easily separated from other species of the *I. purpureus* group on the basis of the large compound eyes. *Iridomyrmex bigi* is separated from *I. variscapus* by its much darker mesosomal colour and uniformly coloured antennal scapes.

Iridomyrmex bigi is apparently uncommon as it has been collected only six times ranging from Western Australia to Queensland (Fig. 9). The only known biological notes were made during the collection of the type series from a site south of Alice Springs, Northern Territory. The area where the nests were found was an open grassland with scattered mulga. The nests were fairly common, with about 15–20 being observed in an area approximately 200 m by 400 m. All nests were similar in structure, being low, bare mounds of compacted soil about 25 cm in diameter and about 3–4 cm high, cleared of vegetation, loose stones and soil. Each nest had a single entrance located at the centre of the mound. Active foragers were observed on and around nest mounds in the morning before about 0900 hours. No foraging activity was seen later in the day. During late morning, after about 1000 hours, several nests were found with the entrance holes blocked with a solid plug of earth. Whether these nests had been active earlier in the morning or were inactive could not be determined. It is assumed that the large eyes found in *I. bigi* and *I. variscapus* are adaptations for nocturnal or crepuscular foraging activity. This assumption is supported by the observation that foraging activity in *I. bigi* decreased markedly during mid-morning. Unfortunately, nocturnal foraging has not been directly observed in either of these species.

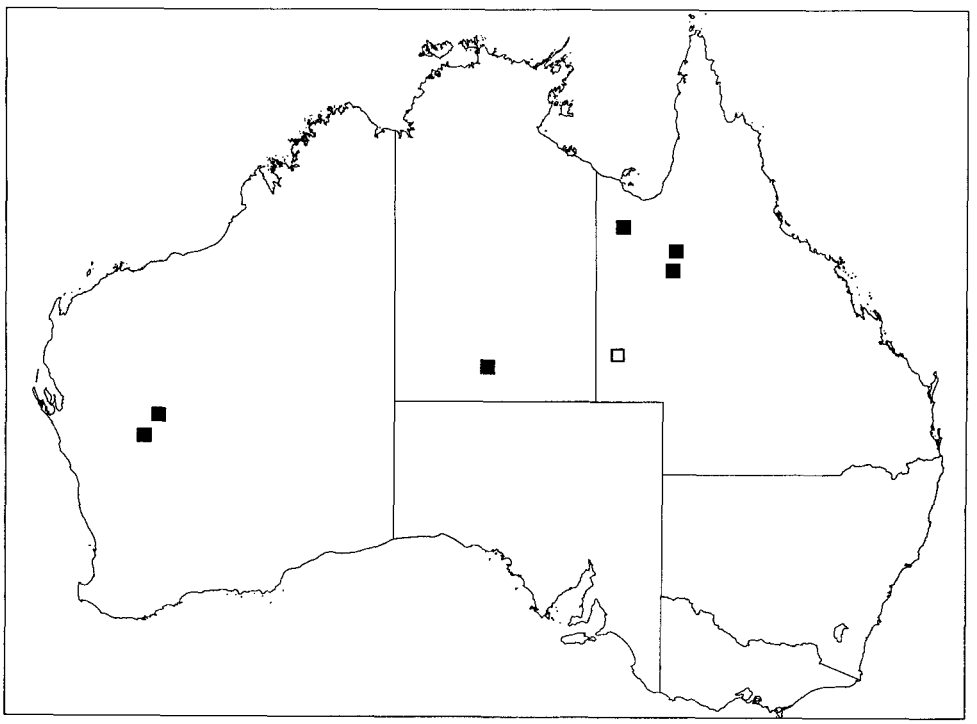

Fig. 9. Distribution of *I. bigi* (■) and *I. variscapus* (□) specimens examined during this study.