

Fig. 14 *Pheidole vigilans* major, head ($\times 34$).

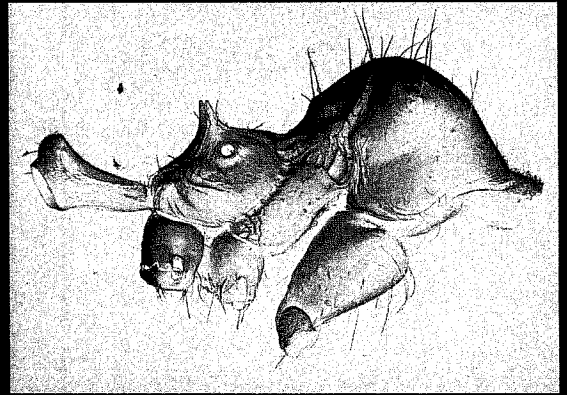


Fig. 15 *Pheidole vigilans* major, lateral mesosoma ($\times 37$).

Nov 1995, ORG, CJG, under picnic tables (PANZ/CGNZ). 5 majors, 25 minors, Mt Albert, cnr Weston Avenue and Richardson Road, 19 Nov 1995, ORG, CJG, on footpath (CGNZ). 4 minors, Mt Albert, Richardson Road, outside shops on corner of Weston Avenue, 19 Nov 1995, ORG, CJG, on footpath (PANZ/CGNZ). 11 majors, 58 minors, (5 larvae), Mt Albert, Owairaka Domain, 19 Nov 1995, ORG, CJG, on meat and food scraps near bin west side, on steps of trig., 135 m, under rubbish bin west side, by seat northwest side (CGNZ). 2 majors, 4 minors, Remuera, J. M. Cleary (NZAC). 3 minors, Takapuna Beach nr The Strand, 26 Dec 1995, ORG, under picnic tables (CGNZ). **WO**: 5 minors, Morrinsville, 7 Turnbull Crescent, 5 Nov 1995, ORG, in bird-pecked strawberry in garden (CGNZ). 6 majors, 11 minors, Morrinsville, 7 Turnbull Crescent, 7 Dec 1995, ORG, under rotten grapefruit in garden (NZAC/CGNZ). 1 major, 197 minors, Raglan Beach Park, 10 Jan 1996, ORG, on orange peel (CGNZ/PANZ/NZAC). **FD**: 1 minor, Secretary I., Grono Bay, 28 Nov–1 Dec 1981, C. F. Morales, Malaise trap over stream (NZAC).

DISTRIBUTION: Australia; New Zealand—AK, WO (?FD).

REMARKS: *Pheidole rugosula* Forel was originally reported as a subspecies of *P. variabilis* Mayr by Forel (1902). However, an examination of type specimens of both taxa shows that *P. rugosula* differs from *P. variabilis* in several characters, which suggests that it is a full species distinct from *P. variabilis*. These characters (taken from major workers) include; (1) its smaller size (head width 1.04 mm and length 1.10 mm in *rugosula*, head width 1.35 mm and length 1.41 mm in *variabilis*); (2) the central region of the clypeus is smooth (central

clypeus with a distinct carina in *variabilis*); (3) the rugae on the dorsal surface of the head extend from the clypeus to the posterior margin (rugae limited to the anterior two-thirds of head in *variabilis*); and (4) the lateral surface of the pronotum is smooth dorsally and with at most weak horizontal rugae ventrally (entire lateral pronotum with vertical rugae in *variabilis*). Because of these differences, *P. variabilis rugosula* is here raised to full species status as *P. rugosula* Forel.

Pheidole vigilans (Smith) (Fig. 12–15)

Atta vigilans Smith, 1858: 166.

MINOR: Head smooth, unsculptured except for some rugae in malar space. Clypeus with longitudinal (long) medial and short lateral carinae (Fig. 12).

Mesosoma including propodeum smooth; mesopleuron also smooth, except reticulate at base of coxae (Fig. 13).

Propodeal spines subequal in length to diameter of propodeal spiracle (Fig. 13).

Petiole longer than postpetiole; postpetiole rectangular in lateral view.

MAJOR: Rugae on head extending about half way to anterior margin; an extensive unsculptured area present posterior to compound eye (Fig. 14). Clypeus convex, with longitudinal carinae.

Mesosoma strongly humped; mesopleuron smooth, unsculptured except at base of coxae (Fig. 15).

Propodeal spines subequal to diameter of propodeal spiracle (Fig. 15).

MATERIAL EXAMINED

INTERCEPTIONS: 1 minor, ex shipment of bananas on