

shining; pronotum transversely rugose, mesonotum, scutellum and mesopleuræ coarsely and sparsely punctate, mesonotum also with a patch of longitudinal rugæ near its posterior margin. Epinotum, petiole and postpetiole opaque, densely punctate. Gaster with fine piligerous punctures.

Hairs more abundant than in the soldier, but more appressed, short and inconspicuous on the appendages.

Head ferruginous red, borders of mandibles and an ocellar spot black. Remainder of body deep castaneous brown, pleuræ and posterior borders of gastric segments paler; antennæ and legs brownish testaceous. Wings grayish hyaline, with pale brown veins and dark brown stigma.

Male. The head is opaque and densely longitudinally rugulose and punctate (shining in the male *xerophila*), the veins of the wings are somewhat darker and the petiolar node is higher and somewhat more acute in profile than in the type of the species.

Described from numerous specimens of all four phases taken at Pasadena and Lakeside, Southern California, during late November, 1910. The colonies were found on the dry open hills in small crater nests, the periphery of which was often covered with discarded chaff and seeds, proving that the species is a harvester. Only a few soldiers were found in each nest. The presence of males and winged females in late November shows that these phases are probably retained in the nests throughout the winter as in *Prenolepis imparis*, *Camponotus americanus* etc., and that the nuptial flight as in these ants probably occurs in the very early spring.

23. *Pheidole vinelandica longula* Emery var. *castanea* var. nov.

Differing from the typical *longula* in its much darker coloration, the body of the soldier being rich chestnut brown, the anterior border of the gaster, the posterior border of the head, the cheeks, disks of mandibles, clypeus, legs, antennæ, pleuræ and epinotum somewhat paler and more reddish. The coloration of the worker is similar, except that the posterior portion of the head and the anterior portion of the gaster are dark like the remainder of these regions.

Described from six soldiers and thirteen workers taken in Miller Cañon, Huachuca Mts., Arizona, at an altitude of 6000 ft.

24. *Pheidole vinelandica cerebrosior* subsp. nov.

Soldier. Like the typical *vinelandica* in color, sculpture and pilosity, but the head decidedly larger though not proportionally longer, and with the postpetiole twice as broad as the petiolar node and produced on the sides as pointed conules.

Worker. Differing from the worker of the typical *vinelandica* only in having the fine punctuation of the thorax and pedicel stronger and these parts therefore more opaque and the erect hairs somewhat less abundant and more obtuse at their tips.