

DESCRIPTIONS OF TWO NEW ANTS OF THE  
GENUS PHEIDOLE.

(Hymenoptera: Formicidae.)

A. C. COLE, JR.,  
Twin Falls, Idaho.

*Pheidole pilifera* subsp. *artemisias* subsp. nov.

*Worker*—Length, 2.5–3 mm.

Head, excluding mandibles, longer than broad; coarsely, irregularly and deeply rugose; vertex excized. Frontal area convex, black, smooth, shining and elliptical; apex somewhat pointed and impressed. Clypeus unnotched; frontal carinae pronounced. Mandibles 6-toothed, rugose; apical tooth short and pointed, other teeth short and uneven. Diameter of eyes one-fourth length of genae. Antennal scapes inwardly curved; funiculi half again as long as scapes; last joint of antennal club longer than both basal joints taken together.

Thorax, petiole and post-petiole finely and rather evenly punctate except for a very small area on dorsum of the pronotum, which is smooth and shining. Apex of petiole blunt, slightly rounded, without a median impression. Surface covered with fine, yellowish, erect or suberect hairs; on antennal scapes suberect and short, on funiculi suberect and short but more dense; erect and long on head and gaster; shorter on thorax, petiole and post-petiole; on tarsi of foreleg short, suberect and rather dense, on other legs shorter and more sparse, shorter on flexor surfaces. Tibiae of hind legs more hairy than of fore or middle legs. Pubescence lacking.

Head, thorax, petiole and post-petiole subopaque; legs and gaster shining. Head, antennal scapes, thorax, femora of legs, petiole and post-petiole dark reddish brown; pronotum slightly lighter. Mandibles and antennal funiculi testaceous; club fuscous. Legs, except fore part of tibiae, testaceous; fore part of tibiae reddish brown.

The worker of *artemisias* differs from that of the typical *pilifera* in the following characters: Head smaller, longer and less broad; frontal carinae less pronounced; antennal funiculi decidedly longer than the scapes; last joint of antennal club longer. Smooth and shining area on dorsum of the pronotum; apex of petiole less pointed; post-petiole somewhat shorter and more prominently elevated. Tip of gaster less pointed and more elliptical. Rugosity coarser, deeper and more irregular. Color of body much darker.

*Soldier*—Length, 3.5–4 mm.

Head, excluding mandibles, longer than broad; vertex deeply and broadly excized. Frontal carinae pronounced; frontal area convex, shining, pointed at apex, angular at base. Genae not greatly convex. Eyes small, about one-seventh length of genae. Occipital angle sharp. Antennal scapes strongly and inwardly curved, two-thirds as long as funiculi, broad and flattened at base and apex, more slender in center. Mandibles strongly convex and smooth, with bases very faintly rugose or punctate; apical tooth large and curved, other teeth small and uneven.

Thorax finely punctate, about twice as long as broad; pronotum angular; mesepinotal constriction pronounced; epinotal spines short and pointed, shorter in proportion to those of worker; petiole as wide as high, broadly but not deeply notched.

Gaster broadly elliptical; smaller than head.

Surface covered with erect and suberect whitish hairs; suberect, short and sparse on antennal scapes; suberect and more dense on funiculi; long, erect and abundant at tip of gaster; head less hairy than that of worker.

Frons of head coarsely and rather unevenly rugose; lower portion of genae finely rugose, upper portion smooth; vertex coarsely and deeply punctate. Petiole and post-petiole finely punctate.

Reddish brown; antennal funiculi and tarsi of legs lighter; vertex and frons of head and the thorax darker; head lighter ventrally; mandibular teeth, petiole, post-petiole and gaster black. Rugose and punctate areas of head infuscated. Post-petiole and gaster shining; remainder of body subopaque dorsally, shining ventrally.

The soldier of *artemisia* differs from that of the typical *pilifera* as follows: Head smaller, longer and less broad; frontal area decidedly more convex; frontal carinae less pronounced; vertex less sharply excized; antennal scapes much shorter than funiculi; mandibles less punctate and pilose; vertex and occipital region much less coarsely punctate. Rugose areas absent on thorax; epinotal spines shorter, straighter and more blunt; apex of petiole more broadly notched, less hairy; post-petiole rather globular, less angular and not as broad. Gaster not greatly smaller than head. Coarser deeper and more irregular rugosity. Color of entire body much darker.

Described from a series of 43 workers and 17 soldiers collected by the writer at Provo, Utah, on a hillslope covered with *Artemisia tridentata* Nutt. The nest was a small chamber beneath a large flat rock. The ants were sluggish and timid.

Cotypes are in the collections of C. H. Kennedy and the author, and topotypes in the collection of M. R. Smith.

**Pheidole californica** var. **shoshoni** var. nov.

*Worker*—Differing from the worker of the typical *californica* as follows: Thorax, legs, antennae, clypeus, mandibles and petiole varying from light tan to testaceous; post-petiole, gaster and head, except appendages and clypeus, darkly testaceous; genae slightly lighter; antennal articulations fuscous. Surface rather smooth and shining, head and gaster more so than the thorax; tibiae transversely or longitudinally striate; head and gaster more hairy than thorax.

*Soldier*—Differing from the soldier of the typical *californica* in the following points: Vertex of head deeply excized. Surface rather evenly and densely hairy, but hairs on petiole and post-petiole long, on legs sparse and on epinotum very sparse or altogether absent. Head, pronotum, and mesonotum shining; gaster more so; epinotum and coxae of middle and hind legs subopaque. Occipital region of head finely reticulate; frons finely and longitudinally rugose.

Legs, petiole and thorax, except pronotum, uniform light tan; pronotum, head, post-petiole and gaster somewhat darker; mandibles a rich brown, their teeth dark brown or black. Anterior portion of gaster lighter than the thorax, posterior portion darker. Rugose areas lightly infuscated.

Described from numerous workers and soldiers collected by the author in the Snake River Canyon, near Twin Falls, Idaho. The nest was beneath a flat rock on the bank of a small stream in an area of *Hordeum jubatum*. Colonies of this variety are abundant in the type locality and are all rather populous.

Cotypes are in the collections of C. H. Kennedy and the author.