POGONOMYRMEX



HARVESTER ANTS

A Study of the Genus in North America

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THE SPECIES

Pogonomyrmex (P.) anzensis n. sp.

Holotype, worker. HL 1.60 mm, HW 1.63 mm, CI 101.9, SL 1.28 mm, SI 78.5, EL 0.37 mm, EW 0.23 mm, OI 23.1, WL 1.72 mm, PNL 0.54 mm, PNW 0.54 mm, PPL 0.36 mm, PPW 0.51 mm.

Mandible as shown in Pl. III, Fig. 13; with only 6 teeth, the seventh tooth (ultimate basal) evidently aborted; sixth tooth (penultimate basal) distinctly shorter than fifth (third basal); fourth tooth (second basal) notably shorter than third (first basal); all teeth sharp. Apical margin of blade broadly and weakly convex; basal margin short, nearly straight.

Base of antennal scape as illustrated in Pl. IV, Fig. 11; shaft moderately and evenly curved in basal half, not flattened nor notably constricted along the bend. Basal enlargement weak; superior lobe with apex subacute; superior declivity long, low, meeting the shaft evenly without an obtuse angle; inferior declivity steeper, meeting the shaft evenly at a weak but distinct, rounded angle; basal flange narrow, thin, curved distad, the margin somewhat thicker along superior lobe from the apex of which it extends distinctly outward for a short distance at a pronounced angle with the apex; lip rather weak, extending for only a short distance outward where it distinctly but rather weakly curves distad, the distal portion short, the curvature smooth, not sharply angular; longitudinal peripheral carina distinct, rather weak, continuing beneath that part of inferior lobe under the lip where it ends, thus forming a weak, well-rounded point; outer lateral surface of inferior lobe not notably depressed, not flattened.

Head, viewed from above, with each occipital corner bearing a prominent, longitudinal, strongly carinate ruga well set off from outer portion of occipital corner. Cephalic rugae coarse, rather widely spaced, strongly divergent into posterior corners, forming prominent, regular whorls above the eyes; interrugal spaces shining, faintly, irregularly, and rather sparsely punctate. Frontal area with a single, strong, median, longitudinal carina.

Contour of thorax, petiole, and postpetiole as shown in Pl. VI, Fig. 12; epinotum with a pair of distinct, short angles; episternal flanges very weakly developed. Thorax strongly rugose, the rugae coarse, widely spaced, arcuately transverse on pronotum, longitudi-

nal on mesonotum, transverse on epinotum, especially coarse and prominent on sides of epinotum; interrugal spaces strongly shining, faintly and sparsely punctate. In lateral view, venter of petiolar peduncle with a prominent, triangular, punctate lobe; postpetiolar venter with a prominent, narrow, triangular, subacute process and just anterior to it a much smaller process. Contours of petiole and postpetiole, viewed from above, as shown in Pl. VII, Fig. 15. Petiolar and postpetiolar nodes opaque, densely and moderately strongly punctate; viewed from above, weakly, irregularly, transversely rugulose in posterior half. Gaster shining, base of first segment densely and finely shagreened.

Head, thorax, petiole, and postpetiole uniform, medium, ferrugineous red; gaster and appendages somewhat lighter, more brownish.

Type Locality. Split Mountain, Anza Desert State Park, California, April 22, 1952, W. S. Creighton leg. The type series consists of the holotype and 29 paratype workers. I have no data concerning the nest or nesting site.

DISPOSITION OF TYPES. The holotype and 12 paratypes are in my collection. The remaining paratypes will be deposited in the U. S. National Museum, the Museum of Comparative Zoology, and the collection of Dr. Creighton.

VARIATION IN PARATYPE SERIES. HL 1.52-1.60 mm, HW 1.52-1.63 mm, CI 100.0-101.8, SL 1.18-1.25 mm, SI 76.7-77.6, EL 0.37-0.38 mm, EW 0.23-0.23 mm, OI 23.5-25.0, WL 1.52-1.75 mm, PNL 0.30-0.38 mm, PNW 0.30-0.38 mm, PPL 0.34-0.42 mm, PPW 0.46-0.53 mm.

AFFINITIES. This species has been assigned to the occidentalis complex, although the characters which determine this assignment are not so definitive as could be desired. It may be a member of the maricopa complex. The conformation of the mandible and paramere of the unknown male should ultimately determine the proper position. During the summer of 1960 I was unable, despite an intensive search, to find specimens at or in the vicinity of the type locality. P. anzensis is unique among its closest relatives in having only 6 teeth in the mandible of the worker. The absent tooth is apparently the ultimate basal, for the basalmost tooth, though not minute, is definitely shorter than the adjoining one, whereas in other members

Pogonomyrmex brevispinosus

of its complex the basalmost (ultimate basal) tooth is distinctly longer than the adjacent one (penultimate basal). Other distinctive features of the workers are the carinate posterior corners of the head and the prominent, narrow, ventral, postpetiolar process (Pl. VI, Fig. 12).

Pogonomyrmex (P.) brevispinosus n. sp.

Holotype, worker (Cole Coll. No. Cal-49). HL 1.67 mm, HW 1.72 mm, CI 103.0, SL 1.21 mm, SI 70.3, EL 0.37 mm, EW 0.27 mm, OI 22.1, WL 1.89 mm, PNL 0.43 mm, PNW 0.44 mm, PPL 0.49 mm, PPW 0.63 mm.

Mandible as shown in Pl. III, Fig. 8; blade not much broader distally than proximally; teeth rather blunt, irregular in size, shape, and spacing; apical tooth rather narrow, acute, longer than subapical tooth which is subequal to first basal; second basal notably shorter than first and third basals; penultimate basal much smaller than ultimate basal, which is not offset from mandibular margin; basal mandibular margin straight, apical margin nearly so.

Base of antennal scape as illustrated in Pl. IV, Fig. 6; basal enlargement well developed; superior lobe prominent, strongly and rather evenly convex, well set off from the shaft by a broadly rounded angle; inferior declivity interrupted by a weak point, meeting the shaft at a well-rounded angle; basal flange weak, extending for no more than one-half the distance between lip and apex of superior lobe; lip bipartite, strong, broad; curvature of shaft as in subdentatus.

Frontal lobes very large, broad, strongly convex, well elevated, completely obscuring antennal insertions in frontal view; outer margin thin, ecarinate, broadly and evenly convex. Cephalic rugae moderately strong, dense, well separated, weakly divergent into posterior corners of head. Interrugal spaces densely and finely punctate, subopaque.

Contour of thorax, petiole, and postpetiole, in lateral view, as shown in Pl. VI, Fig. 6; thoracic dorsum weakly, broadly, and evenly convex. Epinotum armed with a pair of very short, angular, pointed spines; epinotal declivity very short, steep, concave. Thoracic rugae stronger and more widely spaced than cephalic rugae, those on pronotum wavy and arcuately transverse, those elsewhere transverse; interrugal spaces finely and sparsely punctate, rather