which it runs in Bolton's key; *boltoni* differs from *vorticus* in the much stronger mesosomal sculpturation, the transversely rugulose propodeal base and the longer, stouter and more numerous setae of the first gastric tergum. The hairs of the cephalic dorsum are longer than in *vorticus*, especially on the vertex and occiput.

Cataulacus mckeyi NEW SPECIES

Figures 9–18

DIAGNOSIS: *Worker* and *female:* Head about as long as broad; cephalic and mesosomal dorsa with abundant erect, flattened hairs; first gastric tergum with very fine longitudinal rugulae in middle of disk and hairs arising from punctures conspicuously greater than their diameter. *Male:* see description and discussion.

DESCRIPTION: *Holotype worker*. TL 3.93; HL 0.91; HW 0.91; CI 100; EL 0.41; OI 45; IOD 0.74; SL 0.42; SI 46; PW 0.74; WL 1.06; MTL 0.44.

Occipital crest absent, vertex rounded into occiput. Occipital corner denticulate and with a small denticle on margin close to corner, denticles small; side of head denticulate behind eyes. Side of pronotum strongly marginate and denticulate. In dorsal view, mesonotum and propodeum abruptly narrower than pronotum, denticulate at sides; propodeum with a pair of broad dorsoventrally flattened spines. Thoracic dorsum without sutures. Subpetiolar process quadrate, with prominent anterior and posterior angles. Subpostpetiolar process short, simple, acute. First gastric tergum not laterally marginate.

Dorsum of head with a very fine, loose rugoreticulum; interspaces moderately shiny, finely, densely and weakly reticulate-punctate, punctures stronger on vertex. Mesosomal dorsum with a rugoreticulum, no coarser than that of head, with transverse meshes obsolescent, so that rugae are largely longitudinal; interspaces slightly shiny, strongly and densely reticulate-punctate. First gastric tergum moderately shiny, densely reticulate-punctate, with fine, irregular longitudinal rugulae resulting from fusion of margins of aligned punctures, without conspicuous longitudinal rugae. Piligerous punctures scattered, coarser than hairs arising from them.

Dorsal surfaces of head, body and appendages with numerous short, flattened (rarely weakly clavate on cephalic dorsum), simple hairs, longest on gaster; hairs of first tergal dorsum separated by less than their length.

Paratype workers. TL 3.58–4.04; HL 0.86–0.94; HW 0.87–0.94; CI 98–102; EL 0.38–0.44; OI 43–47; IOD 0.66–0.73; SL 0.38–0.42; SI 43–46; PW 0.65–0.77; WL 0.96–1.09; MTL 0.40–0.44 (18 measured).

Paratype females. TL 5.06–5.19; HL 0.95–0.97; HW 0.92–0.96; CI 97–99; EL 0.41–0.44; OI 44–47; IOD 0.73–0.76; SL 0.44–0.45; SI 45–49; PW 0.92–0.96; WL 1.37–1.45; MTL 0.45–0.47 (7 measured).

As workers, with usual modifications of mesosoma for flight. Denticulae of head behind eye and of pronotal margin reduced, sometimes absent. Mesoscutum strongly longitudinally rugate, with few or no cross meshes; rugation of propodeum coarser than that of mesoscutum. Metafemur often with conspicuous longitudinal rugae on posterior face.

Allotype male. TL 4.53; HL 0.81; HW 0.85; CI 105; EL 0.36; OI 42; IOD 0.70; SL 0.32; SI 38; PW 0.83; WL 1.44; MTL 0.55.

Occipital crest absent, occipital corner denticulate, the tooth broad and more or less sharply angulate mesad. Side of head behind eye not denticulate, though margin often irregular. Preocular denticle absent or present but small. Pronotal margin irregular but not denticulate. Anterior arms of notauli well developed and cross-ribbed, posterior arm absent or marked by a very weak depression. Propodeal spines short, stout. Subpetiolar and subpostpetiolar processes simple.

Dorsum of head densely reticulate-punctate with a few fine rugulae and a few weak rugulae close to and behind eyes, the cross-meshes reduced or absent. Pronotum densely reticulate-punctate, with a few irregular rugulae, especially at side. Mesoscutum densely reticulate-punctate, with fine longitudinal rugulae resulting from fusion of margins of aligned punctures. Scutellum similar but less shiny. Propodeal base densely reticulate-punctate and dull, with conspicuous fine longitudinal rugae. Dorsum of petiole densely reticulate-punctate and dull, with a few widely spaced fine rugae; dorsum of postpetiole densely reticulate-punctate and dull, sometimes with a few obscure rugulae at side. First gastric tergum moderately shiny and densely reticulate-punctate on basal one-fourth, punctures becoming increasingly faint caudad; with scattered coarse, setigerous punctures.

Simple, erect hairs present on all dorsal surfaces of head and body, some on head distinctly flattened.

Paratype males. TL 4.39–5.13; HL 0.78–0.86; HW 0.81–0.94; CI 103–109; EL 0.33–0.37; OI 40–43; IOD 0.66–0.77; SL 0.27–0.33; SI 33–37; PW 0.79–0.92; WL 1.44–1.60; MTL 0.47–0.56 (7 measured).

TYPE MATERIAL: *Holotype worker* and *allotype*, CAMEROUN: near Lac Tissongo, Douala-Edea Reserve (lat. 3°29′ N, long. 9°50′ E), about 5 km S of Sanaga River and about 15 km E of Mouanko, 18 July 1976 (D. McKey) in Natural History Museum of Los Angeles County. *Paratype females* (20), *workers* (135) and *males* (7) in BMNH, LACM, MCZ and collection of Mr. McKey.

ETYMOLOGY: This species is dedicated to its collector, Mr. Doyle McKey.

DISCUSSION: The worker of this species will run in Bolton's (1974) key to *pygmaeus* E. André and appears to be related to that species. The most obvious differences are the shorter and sparser pilosity, the more coarsely sculptured mesosomal dorsum and much finer piligerous punctures of the first gastric tergum of *pygmaeus*. The metafemur of *pygmaeus* has several conspicuous longitudinal rugae on the posterior surface; these usually are entirely lacking in *mckeyi*. According to Bolton the CI, OI and SI for *pygmaeus* are 94–97, 41–46 and 49–51, respectively, versus 98–102, 43–47 and 43–46, respectively, for *mckeyi*. The latter is also a smaller species, with a HW range of 0.87–0.94 versus 0.92–1.06 in *pygmaeus*.

The females of the two species are very similar, but *mckeyi*, with a HW range of 0.92–0.96 (1.08 in *pygmaeus*) is smaller. The CI, OI and SI of *pygmaeus*, as given by Bolton, are 92–95, 40–46 and 48–50, respectively. These are 98–102, 43–47 and 43–46, respectively, for *mckeyi*. Presumably there are differences in pilosity much like those between the workers of these species.

Bolton's description of the *pygmaeus* male does not suggest many differences between it and the male of *mckeyi*. According to Bolton, the side of the head, behind the eye, is denticulate (simple in *mckeyi*) and the pronotum is conspicuously rugoreticulate (very sparse rugulae laterad in *mckeyi*). Bolton does not