

A REVIEW OF THE GENUS *NEOGASTEROCERCUS*,  
NEW GENUS IN THE UNITED STATES  
(COLEOPTERA: CURCULIONIDAE)

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The purpose of this paper is to report the occurrence of two forms of *Neogasterocercus*, new genus (Cryptorrhynchinae, Cryptorrhynchini) in the United States and to rectify an error in the literature.

I am indebted to the late Sir G. A. K. Marshall for his help and information on the genus; to Dr. Barry D. Valentine of The Ohio State University for type comparisons at the Museum of Comparative Zoology and helpful criticisms; to Mr. Hugh B. Leech of the California Academy of Sciences, who kindly sent material studied by Dr. E. C. Van Dyke; and to Miss Rose E. Warner of the United States National Museum for loan of material.

**Neogasterocercus**, new genus

Rostrum longer than the head, nearly straight, robust, enlarged and depressed apically; scrobes ventro-lateral, deep, oblique, terminating near the lower front angle of eyes. Antennae quite short; funicle seven-segmented; antennal club short and blunt. Eyes lateral, suboval, large, feebly convex, one-half covered by the ocular lobes when rostrum in repose. Prothorax transverse, rounded laterally or the sides parallel behind, narrower in front, the posterior margin bisinuate, the anterior margin feebly lobed behind the eyes; posterior margin at middle with a notched basal process lying against or under scutellum. Scutellum distinct. Elytra oblong, subcylindrical, 10 striate, the 10th abbreviated; all intervals subcarinate, most asperate. Legs elongated, the middle pair shorter; femora slender or feebly dilated; metafemora not attaining the apex of the elytra; all femora feebly dentate, the tooth largest on the anterior pair; all tibiae

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flattened, not or obsoletely carinate on anterior face, with a prominent claw at the inner apical angle, a small spur at the outer apical angle, the anterior tibiae of both sexes with a small but very distinct, densely pubescent pad at the inner apical angle of the anterior face. Tarsi with first segment elongate, the third spongy below; anterior pair of male with long hairs. Prosternal groove closed behind, deeply impressed between anterior coxae, metasternal canal deep, its sides prominently elevated, the posterior rim semicircular. Metathoracic episterna very distinct. Abdominal sternites 1 and 5 subequal, slightly longer than any of the remaining, 2 only slightly longer than 3 or 4.

Type species. *Cryptorhynchus brachialis* LeConte

The genus *Neogasterocercus* differs from the old world genus *Gasterocercus* in that the former has the anterior tibiae with a small, but very distinct, densely pubescent pad at the inner apical angle of the anterior face, and a small spur at the outer apical angle, the elytral intervals carinate and a less parallel-robust form. The new genus differs from *Cophes* in the broader, flatter spatulate rostrum and the presence of the spur at the outer apical angle.

All new world species formerly placed in *Gasterocercus* should be placed in this genus. *Neogasterocercus* should be placed ahead of *Cophes* Champion in our lists. The latter should be placed next to *Sternocoelus* Kuschel (formerly *Coelosternus* Schönherr nec Sahlberg).

KEY TO THE FORMS OF *Neogasterocercus* IN AMERICA NORTH OF MEXICO

1. Yellow scales present on dorsum; general form robust; (Texas).....  
*N. brachialis brachialis* (LeConte)
- 1'. Yellow scales absent on dorsum; general form more narrow and elongate; (Arizona).....  
*N. brachialis vandykei*, new subspecies

*Neogasterocercus brachialis brachialis* (LeConte)

*Cryptorhynchus brachialis* LeConte 1884, p. 31. (**New Combination**)

Length 4.5 to 11.0 mm; width 3.0 to 4.5 mm.

Elongate, robust; black with the antennae reddish brown; densely clothed with white, yellow, and brown, oval, flat scales; a feebly defined brown spot on the pronotum in front of scutellum. Rostrum about three-fourths as long as pronotum in ♂, four-fifths as long in ♀, strongly alutaceous, moderately deeply punctured basally, sparser, finer and shallower apically. Antennae inserted two-fifths from base. Second segment of funicle two-thirds as long as first; the remaining segments subcylindrical, subequal. Club oval, robust; first and second segments equal in length and constituting more than three-fourths length of club. Head coarsely, deeply, densely punctured, very alutaceous; the front between eyes with narrow, elongate yellow scales. Eyes feebly convex, finely granulated. Prothorax wider than long; the sides subparallel to arcuate in basal half, then strongly narrowed to apical constriction; disc strongly convex, coarsely, closely, deeply punctured, the bottoms of the punctures angulate with surface of disc; a short, very narrow carina at base, unmodified before scutellum. Elytra slightly wider than prothorax, nearly one-half longer than wide, sides very feebly arcuate behind humeri, more strongly rounded apically; humeri rounded, enclosing basal angles of prothorax; the first elytral interval with a very prominent, tuberculate elevation behind the scutellum, the third interval strongly elevated, the remaining intervals strongly convex, intervals 1, 2, and 3 prominently asperate, remainder moderately so, each asperate with a clavate, recumbent, yellow or brown scale. Venter densely clothed with flat, clavate, yellow and white scales. Prosternum deeply canaliculate; mesosternum forming anteriorly a deep pocket for reception of rostral apex. Abdominal segments sparsely, coarsely punctured, the fifth punctured as the others; first and second segments convex in ♀, feebly concave in ♂, the remaining segments flattened. Anterior femora clavate, unidentate. Anterior tibiae straight on outside, feebly sinuate mesially. The anterior tarsi of male more strongly dilated and with long, coarse setae laterally; those of ♀ lacking long setae.

*Distribution.* Known only from Texas and extreme northeastern Mexico. Material was examined from the type locality, Columbus, Texas, and the following localities; TEXAS: Brownsville, Angus, and Provident City; MEXICO: Tamaulipas, Matamoros. The type was collected by Schwarz on black gum twigs.

**Neogasterocercus brachialis vandykei**, new subspecies

*Cophes gibbus* Van Dyke (*nec* Champion) 1930, p. 164.

*Holotype*. Male. Prescott, Arizona, IX-2-61, ELS, (ELS); no. 62.

Length 6.9 mm; width 2.9 mm.

Elongate-oval; black with antennae and last tarsal segment reddish brown; densely clothed with black, white, gray, pale brown, and pink, broad, oval scales; the black scales condensed in a large spot at the base of pronotum, with a white spot on each side; the pink scales condensed mainly at base of elytra; remainder of prothorax and elytra mottled with black, gray, pink, and pale brown scales. Rostrum about two-thirds as long as pronotum; coarsely, rugosely punctured throughout. Antennae inserted just behind middle. Second segment of funicle one-half as long as first; remaining segments subcylindrical, subequal. Club elongate-ovate, first and second segments equal in length and constituting seven-eighths length of club. Head moderately, irregularly punctured, each puncture covered with a flat rounded scale; the front between eyes with broad oval scales and a few narrow brown scales. Prothorax wider than long; the sides subparallel to arcuate in basal half then strongly narrowed to apical constriction; disc strongly convex, coarsely, closely, deeply punctured, the bottoms of the punctures angulate with the surface of the disc; a short narrow basal carina present, terminating in a swollen rounded tubercle immediately before the scutellum. Elytra slightly wider than prothorax, a little more than one-half longer than wide; sides subparallel in basal half, then rounded to apex; humeri rectangular, enclosing basal angles of prothorax; striae seriate-punctate, the punctures rectangular; the first interval with a very prominent, tuberculate elevation behind the scutellum, third interval strongly elevated, the remaining intervals strongly convex, intervals 1, 2, and 3 prominently asperate, each asperate with a clavate, recumbent, gray scale. Venter moderately clothed with flat, broadly rounded, tan, and white scales. Pro- and mesosternum as in *N. brachialis brachialis*. Abdominal segments sparsely, coarsely punctured, the fifth segment more deeply, densely punctured, the first and second segments strongly convex, the first feebly concave at middle, the remaining segments flatter, feebly convex. Legs robust, only slightly longer than those of ♀. Anterior femora clavate, unidentate. Anterior tibiae straight on outside, feebly sinuate mesially. Anterior tarsi strongly dilated, with intermixed long coarse and fine setae laterally.

*Allotype*. Female. Florida Canyon, Santa Rita Mts., Arizona, VIII-10-24, J. O. Martin, in the Entomological Collection, the California Academy of Sciences.

Differing from the male only in that the rostrum is smoother, more finely punctured and strongly alutaceous; has the first abdominal segment not concave at middle and the anterior tarsi lacking the long lateral setae.

*Other type material*. Fifteen paratypes, all from Arizona, length 7.0 to 9.5 mm, width 3.0 to 4.25 mm, deposited as follows; in (ELS), 1 ♀, Presumido Pass, Baboquivari Mts., VII-12, 2 ♂♂, Santa Rita Mts., VII-12/24-15, 1 ♂, Sabino Cyn. nr. Tucson, I-6-24, Hopk. U.S. 99304, G. Hofer, 1 ♀, Rosemont, Pima Co., VII-22-42; in the California Academy of Sciences, 1 ♂, St. Xavier Mission, Tucson, VIII-29-24, E. P. Van Duzee; in the Charles Dury Collection, Cincinnati Museum of Natural History, 1 ♂, 3 ♀, Santa Rita Mts., VII-12/24-15; in the British Museum (Natural History), 1 ♀, Octave, VIII-19; in the United States National Museum, 1 ♂, 2 ♀, Sabino Cyn. nr. Tucson, I-26-24, Hopk. U.S. 99304, G. Hofer, 1 ♀, Globe, D. K. Duncan. The material collected in Sabino Canyon was from "*Zizyphus obtusicola*." I have been unable to learn the identity of this plant. I assume that it belongs to the Rhamnaceae in as much as Arizona plants formerly considered in *Zizyphus* are now in the genus *Condalia*.

This subspecies was mistaken by Dr. E. C. Van Dyke for *Cophes gibba* Champion which it resembles superficially. It differs from *N. brachialis brachialis* in the more elongate form, the absence of yellow scales from the dorsum, the scales are more broadly rounded, the front with broadly rounded scales, the more strongly carinate elytral intervals, and the more densely punctured abdominal fifth segment. No differences could be found in the male genitalia.

Subspecies should have an area of intergradation, however, none has yet been found for these two. This may be due to inadequate collecting in the area between the known range of the subspecies, but I am more of the opinion that there is no area of intergrade and that this is due to discontinuity of habitat. While some may argue that the last point would justify species rank, I feel that the forms differ only in a magnitude that would justify subspecies rank.

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