

A NEW SPECIES OF BRUCHUS WITH NOTES ON
BRUCHUS MAJOR FALL AND JULIANUS HORN
(Coleoptera, Bruchidæ)

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On checking over the J. N. Knull collection of Bruchidæ recently, the writer had the pleasure of observing numerous specimens of *Bruchus julianus* Horn (= *ochreolineatus* Fall). The late Dr. H. C. Fall, in his brief description of *B. major*, in which he compares *julianus* with *major*, overlooked the most important diagnostic character separating the two species. This is the dentiform elevations of the basal margins of the elytra. It is best seen from a posterior view over the top of the elytra and shows as two small, approximate humps on each side of the scutellum midway between the humeri and the scutellum. In *julianus* the elevations are located between the second and fourth elytral striæ and are very approximate. In *major* these structures are more acute, more widely separated, and most important—are located between the fourth and fifth striæ. This character appears constant for some seventy-five specimens of *julianus* observed from various localities in Texas, Arizona, and Lower California, and for numerous examples of *major* from Brownsville, Texas.

Dr. Fall apparently had large, well characterized specimens of *major* in hand when he described the species. The material in the collections of Dr. Knull and the writer shows *major* to vary considerably in size and markings. In fact, the above described character was the only means for determining one badly rubbed specimen of *major*. In an earlier synopsis of the species of *Bruchus* (1910), Dr. Fall implied that this character is too variable to be important.

A specimen of the *julianus* complex from the Huachuca Mountains, Arizona, possesses such differences in character as to seem worthy of consideration. Later collections from this area may prove it to be a subspecies of *julianus*; but until further material manifests this possibility, the present specimen is described as a distinct species.

***Bruchus knulli* White, new species**

Size and shape of *julianus* Horn but lacking the ochreous lines of pubescence on the elytra, with the antennæ entirely pale, and with the pygidium finely punctate whereas *julianus* has coarse

punctures. The shape of the body differs noticeably; *julianus* is parallel sided whereas *knulli* is gradually narrowed from middle to base of elytra. The punctures of the elytral striæ are coarse and strongly impressed in the former while they are fine and feebly impressed in the latter. Ferruginous pubescence evenly clothes the surface of the elytral disk and pronotum of *knulli*. The basal elytral denticles are similar in both forms. Specimens of *julianus* are frequently rubbed, obscuring the ochreous lines of pubescence on the elytra, but this specimen of *knulli* has not been rubbed. Length, 4.5 mm.; width, 2.6 mm.

Holotype, female, collected by J. N. Knull in the Huachuca Mountains, Arizona, July 20, 1936, in the Knull collection at Ohio State University. The species is gratefully named in honor of its collector.

The usual technical description has been omitted because of the similarity to a description of *julianus*. The position of *knulli* in our list should be between *julianus* and *quadridentatus* Schffr.

GEOMETRID NOTES AND NEW SPECIES

(Lepidoptera)

BY EDWARD GUEDET

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Nemoria mentastii Guedet, new species

Palpi pale ochreous tinged with reddish. *Front* tinged with reddish. *Collar* and thorax green. *Abdomen* with three white dorsal spots narrowly circled with reddish. *Primaries* light green; costa narrowly edged with pale ochreous; ante-median line white, starting about one-third out from base, perpendicular to costa and running with a slight outcurve to inner margin about three-fifths out from base where it rounds out meeting the post-median line; without discal dot; post-median line straight, parallel with outer margin, forming a V with the ante-median line; fringe ochreous with a very slight tinge of reddish at apex. *Secondaries* pale green, concolorous with primaries; ante-median line boldly and evenly out-curved; without discal dot; post-median line with a slight angle on the median vein; fringe as on primaries. *Beneath* paler green; without discal dot; lines above faintly showing through. *Expands* 27 mm.

Holotype, female, No. 5185, Calif. Acad. Sci., Ent., Glen Ellen, Sonoma County, California, May 12, 1940.

The distinctive feature of this species is the V-shaped lines of the primaries. The species is named after the Rev. R. Mentasti, of Sonoma, California, through whose kindness I received the unique type.