

SOME NEW NORTH AMERICAN SPECIES OF
EPICAUTA (COLEOP., MELOIDÆ)¹

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The completion of my revision of the genus *Epicauta* having been delayed by my entrance into the U.S. Army, I have decided to publish separately the new species in it so that they will be available to workers in this group. They will be described more fully in my revision.

Epicauta maculata (Say)

Black, clothed with olive-cinereous to cinereous pubescence, with numerous denuded spots. Maxillary palpi of male enlarged, flattened, labial palpi small. Male anterior tarsi not modified. East of the Rocky Mountains, from North Dakota to Wickenburg, Arizona and eastward to western Iowa and Missouri.

Epicauta nogales sp. n.

Male labial palpi not nearly as greatly expanded as in *maculata*. Male anterior tarsi not modified. Elytra shorter and broader, leaving the tip of the abdomen broadly exposed. Denuded spots small.

Holotype: ♂, Nogales, Arizona, Aug. 10–13 Wickham (MCZ No. 26085).

Allotype: ♀, eutopotypical (MCZ).

Paratypes: 4 eutopotypical (MCZ), 1 eutopotypical (USNM), 1 topotypical — Sept. 9, 1906 — Nunenmacher (USNM), 2 Tucson, Arizona (USNM).

Epicauta normalis sp. n.

Replaces *maculata* from the Rockies to the Pacific, except in Arizona. Maxillary palpi as small in the male as in the female.

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First segment of male anterior tarsi narrow, slightly outcurved, with the pad absent from at least the basal three-fourths.

Holotype: ♂, Bridgeport, California, July 12-15 Wickham (MCZ No. 26086).

Allotype: ♀, eutopotypical (MCZ).

Paratypes: CALIFORNIA: 6 eutopotypical (MCZ), 3 Cal. (MCZ), 6 Shasta Valley (AMNH), 2 Eagleville (AMNH). OREGON: 1 Echo (MCZ), 1 Burns (MCZ), 1 Or. (MCZ). WASHINGTON: 2 Yakima Valley (MCZ), NEVADA: 2 Paymaster Cañon—Lone Mt. (ANSP), 5 Reno (Werner), 3 Nev. (MCZ). IDAHO: 1 Ruhl (MCZ). WYOMING: 2 Green River City (MCZ), 1 Laramie (Ohio), 3 Wy (MCZ). MONTANA: 2 Helena (MCZ). UTAH: 1 Fillmore (BYU), 1 American Fork (BYU), 1 Sheep Creek-Duchesne Co. (BYU), 1 Jordan River (BYU), 1 Provo (BYU), 1 Indianola (BYU), 1 Ogden (AMNH), 1 Ut. (MCZ). COLORADO: 8 Manitou (MCZ), 2 La Veta (MCZ), 2 Colo. Spgs. (1 MCZ, 1 Ohio), 5 Windsor (3 Colo., 2 Werner), 2 Ft. Collins (Colo.), 2 Colo. (1 MCZ, 1 Ohio). ARIZONA: 4 Chiricahua Mts. (Ohio), 1 Huachuca Mts. (Ohio).

Epicauta phoenix sp. n.

Elytra more convex than in the others in this group. Antennæ shorter and more slender. Spots on the elytra moderately large, elsewhere small and indistinct. Male with the palpi small, the anterior tarsi normal.

Holotype: ♂, Phoenix, Arizona, Liebeck Coll. (MCZ No. 26070).

Allotype: ♀, eutopotypical (MCZ).

Paratypes: Phoenix, Arizona: 11 (MCZ), 6 July 16-18 Wickham (5 MCZ, 1 USNM), 2 Wenzel Coll. (Ohio). 3 Ariz. (2MCZ, 1 AMNH).

Epicauta andersoni sp. n.

Close to *pardalis* Lec. but has both pairs of palpi enlarged and flattened in the male and with the antennæ more slender.

Holotype: ♂, Gallo Springs, New Mexico VI-21 Green (USNM).

Allotype: ♀, eutopotypical (USNM).

Paratypes: NEW MEXICO: 4 eutopotypical (USNM). ARIZONA: 1 Flagstaff VI-20-35 Wildermuth, on potatoes

(USNM), 1 Flagstaff, VIII-2-37 Maehler (Colo.). TEXAS: 1 Childress VI-8-06 Mitchell (USNM). KANSAS: 1 Ks. (MCZ NO. 26084).

Epicauta uniforma sp. n.

This is one of the species from the Southwest misidentified as "*cinerea*." Uniformly clothed with dull ferrugineous to golden pubescence, and without markings at the base of the elytra. First segment of male antennæ slender, reaching to the hind margin of the eye, not covered with golden pubescence. Head subquadrate. Antennal calluses not denuded. Eyes moderately narrow.

Holotype: ♀, Ramah, Arizona — Aug. — Vestal (MCZ No. 26581).

Paratypes: COLORADO: 1 LaJunta (AMNH), 1 Hoehne (Parker). TEXAS: 7 Davis Mts. (6 Ohio, 1 Parker), 1 Odell (ANSP), 1 Chisos Mts. (Parker), 1 Texas (Parker). ARIZONA: 1 Baboquivari Mts. (Ohio), 1 Nogales (Ohio), 1 Patagonia Mts. (Ohio), 4 Tombstone (2 ANSP, 2 Frost), 2 Douglas (Parker), 2 Tucson (Parker), 1 Picacho (Parker), 1 Tucson-Liebeck Coll. (MCZ).

Epicauta alpina sp. n.

Similar to *uniforma* but always clothed with golden pubescence and narrower. First segment of antennæ with golden pubescence and in the male extending one-fourth its length beyond the eye, slightly excavated externally near the tip. Head rather narrowly triangular, especially in the male.

Holotype: ♂, Alpine, Texas Jul. 20-22, 4400-6000 ft., Wickham (MCZ No. 26061).

Allotype: ♀, eutopotypical (MCZ).

Paratypes: TEXAS: 2 eutopotypical (1 MCZ, 1 USNM), 2 Alpine (USNM), 3 Texas (Parker). NEW MEXICO: 1 Deming (Parker).

Epicauta brunnea sp. n.

Another Western species commonly misidentified as "*cinerea*." Large, black, the elytra brown; entirely clothed with appressed ferrugineous pubescence. Elytra darker across the base. First segment of the anterior tarsi of the male with the pad broadened, about twice as broad as on the second segment.

Holotype: ♂, Alpine, Texas, 6000 ft. 8-15-26 (MCZ No. 26064).

Allotype: ♀, topotypical 8-20-26 (MCZ).

Paratypes: TEXAS: 1 topotypical (MCZ), 2 Brewster Co. (MCZ), 1 Fort Davis (Frost), 1 Sabinal (USNM). ARIZONA: 2 Sta. Cruz Village-Cobabi Mts. (1 ANSP, 1 AMNH), 2 Superior (1 ANSP, 1 AMNH), 1 Douglass (USNM), 4 Capitan Mt. (3 Parker, 1 Werner), 1 Globe (Parker), 2 San Carlos (1 Parker, 1 Werner), 1 Canon Lake (Parker), 1 Gila Valley (Parker), 1 Whiteriver (AMNH). COLORADO: 1 Denver (Ohio).

Epicauta floridensis sp. n.

Similar to the cinereous form of both species known as *cinerea* in the East. The antennæ are slightly more slender than in the species which feeds on *Clematis* and have the first segment more slender. Posterior tibial spurs slender. Smaller and more slender than either species.

Holotype: ♂, Sebring, Florida VI-1-10-42 Parsons (MCZ No. 26067).

Allotype: ♀, eutopotypical (MCZ).

Paratypes: FLORIDA: 15 eutopotypical (MCZ), 1 Croom (MCZ), 2 Cleveland (MCZ), 4 Capron (USNM), 1 Biscayne (USNM), 2 Tampa (USNM), 3 Cutler (USNM), 2 Jacksonville (USNM), 1 St. Nicholas (USNM), 2 Lake Istopoga (MCZ), 8 Fla. (MCZ). NEW JERSEY: 4 DaCosta (MCZ). MISSISSIPPI: 1 Lucedale (MCZ).

Epicauta punctipennis sp. n.

Black or dark brown, elytra ferrugineous. Rather densely clothed with tannish-cinereous pubescence. Elytra with small, sparsely scattered, denuded spots. There are no spots on the rest of the body. Male anterior tibiæ with two spurs.

Holotype: ♀, Columbus, Texas; May 24, 1879 LeConte Coll. (MCZ No. 26159).

Allotype: ♂, "Tex.," Liebeck Coll. (MCZ).

Epicauta ensiformis sp. n.

Black, sparsely clothed with erect black pubescence. Resembles *oblita* in general form but has the antennæ strongly ensiform, with the third segment the broadest and flattened.

Anterior tibiæ of male with two spurs and male anterior tarsi not modified.

Holotype: ♂, "Cal." with an ink spot on the lower part of the "a," Liebeck Coll. (MCZ No. 26079).

Paratype: 1 ♂, "Cal." Fall Coll. (MCZ).

Epicauta occidentalis sp. n.

Identical with *lemniscata* but has the intermediate segments of the antennæ broadened and somewhat flattened and has the outer edge of the anterior tibiæ and tarsi denuded, smooth and shiny. No intergrades have been seen.

Holotype: ♂, Cambridge, Nebraska VII-VIII-21 Morse (MCZ No. 26069).

Allotype: ♀, eutopotypical (MCZ).

Paratypes: NEBRASKA: 6 eutopotypical (MCZ). KANSAS: 1 Abilene (MCZ), 2 Ks.-Liebeck Coll. (MCZ). COLORADO: 5 Rocky Ford (Colo.), 3 Joes (Colo.), 1 Ft. Collins (Colo.). TEXAS: 3 Dallas-Boll (MCZ), 2 Tex. (MCZ). LOUISIANA: 1 Baton Rouge (USNM), 3 La. (MCZ).

Epicauta fortis sp. n.

Resembles *sericans* greatly in general shape and habitus but is consistently smaller than that species, has the antennæ shorter and has the outer spur of the hind tibiæ broad and flattened. Some specimens of *ferruginea* resemble it but they are narrower and have the pubescence coarser.

Holotype: ♂, Phoenix, Arizona, Liebeck Coll. (MCZ No. 26066).

Allotype: ♀, eutopotypical (MCZ).

Paratypes: ARIZONA: 17 topotypical (MCZ), 5 Tucson (MCZ), 1 Picacho (Colo.), 52 Florence (ANSP). NEW MEXICO: 1 Las Cruces (USNM).

Epicauta barberi sp. n.

Black, fairly densely clothed with semi-erect black pubescence. Head and pronotum shiny. The head is much more densely and finely punctured than in *puncticollis* or *oblita*. The outer division of the tarsal claws is curved from the base and the inner division is not more than three-fourths as long as the outer. In *puncticollis* and *oblita*, the outer division is curved near the tip and the inner division is almost as long as the outer.

Holotype: ♂, La Panza, California May 17-18 CCWilson (USNM).

Paratype: 1 ♂ San Luis Obispo, California — May 16-35 CC Wilson (USNM).

Named for Mr. H. S. Barber of the U. S. National Museum.

Epicauta kansana sp. n.

Black, with scattered semi-erect but rather short pubescence, resembling *puncticollis* and *oblita*. Head and pronotum shiny, the head more densely punctured than the pronotum. Tarsi unusually slender. Inner division of tarsal claws as long as the outer but very slender. The outer curves near the tip. Fourth segment of the antennæ longer than the fifth.

Holotype: ♂, Sedgwick, Kansas, June 4, 1910 J. C. Warren (USNM).

Paratypes: 2 eutopotypical (USNM), 2 topotypical, April 7, 1910 Warren (USNM).

Epicauta calcarata sp. n.

Similar to *sericans* in general shape but has longer pubescence, especially on the pronotum. The labrum is deeply excised. The pronotum is noticeably globose. Tibial spurs very stout, especially on the anterior legs, curved. Mandibles long, the tips crossed.

Holotype: ♀, Roswell, New Mexico, Aug., 1902 (MCZ No. 26065).

Allotype: ♂, between Wild Horse and Plateau, Culbertson Co., Texas 2852 ft. Aug. 31, 1937, Rehn, Pate, Rehn (ANSP).

Paratypes: 1 Carlsbad, New Mexico — R&H — Aug. 25, 1921 (ANSP), 1 Dim Lake — Pecos Val. — New Mexico Aug. 21, 1902 (MCZ), 1 Ft. Stockton, Texas 2500 ft. Sept. 1, 1937 RPR (ANSP).

Epicauta aspera sp. n.

Misidentified as "*cinerea*" in most collections. Second to fourth abdominal sternites, sometimes fifth, with a black median spot and with a spot anteriorly on each side near the edge. Male middle and posterior femora denuded behind and with marginal long hair. Actually belongs to the *caviceps* group but does not have the head modified. Uniform above but for a humeral and

scutellar spot on the elytra, sometimes joined across the base. Holotype: ♂, Salida, Colorado Aug. 13 (MCZ No. 26063).

Allotype: ♀, Jemez Springs, New Mexico (MCZ).

Paratypes: COLORADO: 4 Masonsville (3 Colo., 1 Werner), 5 Ft. Collins (4 Colo., 1 Werner), 3 Boulder (1 Colo., 1 AMNH, 1 Parker), 1 B. Rotger C. R. (Parker), 1 Morison (Colo.), 1 Colo. (Colo.). TEXAS: 4 Davis Mts. (2 Ohio, 1 Parker, 1 Werner). NEW MEXICO: 3 Jemez Spgs. (Frost), 1 Barton—6700 ft. (ANSP). ARIZONA: 4 Copper Basin—near Prescott (USNM), 1 White Mts. (Parker), 1 Wilmsn. Val.—Ball (Parker).

Epicauta parkeri sp. n.

This and the species that follow fall into the old genus *Macrobasis*, which I have decided to suppress under *Epicauta*.

Resembles *E. gissleri* (Horn) in general appearance. Black, sparsely clothed with cinereous pubescence, which forms denser margins on the elytra. The antennæ are more slender than in *gissleri*, with the segments less distinctly separated. The head is elongate-triangular and the mandibles are as long as in *mimetica*. They go one-third beyond the labrum, cross at the tip and have a distinct tooth.

Holotype: ♀, White Mts., Arizona July 8, 1933 (Parker).

Paratypes: 3 eutotypical (1 Parker, 2 Werner), 1 topotypical (Parker), 1 San Rita Mts.—Ball (Parker), 1 San Rita Mts.—5–8000 ft.—July (Snow) (MCZ No. 26080), 1 Globe (Parker), 1 Baboquivari Mts. (MCZ), 1 Flagstaff (Ohio).

Epicauta polingi sp. n.

Three distinct species have been known under the name of *linearis*. None of these is the true *linearis*, which has the first segment of the male antennæ excavated externally at the tip and has the second segment shorter than the third in both sexes. It is a rare species.

Slender. Head and pronotum black or dark brown, the elytra pale ferruginous, the whole rather loosely clothed with cinereous to luteous pubescence. First segment of male antennæ exceeding the head by one-third its own length, not over one-sixth as broad as long, straight, flattened behind and with cinereous pubescence along this surface. Second segment narrower, elongate oval, about one-third as long as first. The first

and second segment together are about equal to the rest in length. Anterior tarsi of male with the first segment short, contorted.

Holotype: ♂, Davis Mts., Texas VI-VII-1928 OCPoling (MCZ No. 26071).

Allotype: ♀, eutopotypical (MCZ).

Paratypes: 6 eutopotypical (MCZ), 18 topotypical VI-VIII-DJ&JN Knull (14 Ohio, 4 Parker), 1 Phantom L. — Davis Mts. (MCZ), 7 Alpine (1 AMNH, 6 MCZ), 4 Sabinal (USNM), 3 Devil's River (USNM), 2 Rio Frio (USNM), 2 Cotulla (USNM), 24 Tex. (MCZ), 1 Texas-Ulke Coll. (Carnegie). NEW MEXICO: 2 Cloudcroft (MCZ), 1 Alamogordo (MCZ). ARIZONA: 1 Sta. Catalina Mts. (USNM), 2 Douglass (USNM).

Epicauta liebecki sp. n.

Head and pronotum black or dark brown, elytra brown, much darker than in *polingi*, margined with denser pubescence. First segment of male antennæ one-fifth as broad as long and the first two segments distinctly longer than the following. Averages smaller than *polingi*. The posterior tibial spurs are more slender than in the other two.

Holotype: ♂, Tucson, Arizona V-25 Liebeck Coll. (MCZ No. 26068).

Allotype: ♀, eutopotypical (MCZ).

Paratypes: ARIZONA: 2 eutopotypical (MCZ), 1 Bowie (MCZ), 1 Ajo (MCZ), 1 Pima Co. (MCZ), 6 Globe (Parker), 6 Congress Jc. (Ohio), 2 Wickenburg (Ohio), 1 Nogales (AMNH), 9 Columbia-on *Prosopis pubescens* (USNM), 1 Tempe (USNM), 1 Lowell (USNM), 3 Sabino Cn.-Sta. Catalina Mts. (2 MCZ, 1 USNM), 1 Sta. Catalina Mts. (USNM), 9 Baboquivari Mts. (MCZ). SONORA: 1 Imuris VI-25-40, on pigweed (USNM).

Epicauta arizonica sp. n.

Uniformly luteous to dull brown, with sparse cinereous pubescence. Eyes larger than in the other two. First segment of male antennæ exceeding head by only one-sixth its own length, a little less than one-fifth as broad as long. First two segments of male antennæ about one-fifth shorter than the rest. Averages smaller than the other two.

Holotype: ♂, Baboquivari Mts., Arizona IX-5-30-23 Fall Coll. (MCZ No. 26062).

Allotype: ♀, topotypical IX-23 (MCZ).

Paratypes: ARIZONA: 4 topotypical (MCZ), 4 Kits Peak Rincon-Bab. Mts. (AMNH), 15 Tucson (Ohio), 1 Wickenburg (Ohio), 9 Nogales (8 USNM, 1 MCZ), 1 Capitan Mt. (Colo.), 5 Canon Lake (Parker), 7 Globe (Parker), 3 San Bernardino Rch.-Cochise Co. (2 MCZ, 1 USNM), 1 Phoenix (MCZ), 1 Rice (MCZ), 1 Sta. Rita Mts. (MCZ). SONORA: 4 Arizpe (USNM).

Epicauta texana sp. n.

Close to *albida* (Say). The first segment of the male antennæ is longer and less curved, narrower, reaching to middle of thorax. Shorter and stouter than *albida*. The black pronotal markings are absent or extremely faint. The abdominal markings of *albida* are always lacking. Eyes narrower than in that species.

Holotype: ♂, Davis Mts., Texas VIII-2-37 DJ&JN Knull (Ohio).

Allotype: ♀, eutopotypical (Ohio).

Paratypes: TEXAS: 9 eutopotypical (Ohio), 3 Alpine VII-20-22 4400-6000 ft. Wickham (2 USNM, 1 MCZ No. 26072), 3 Marfa (Ohio), 1 Texas-Wenzel Coll. (Ohio).