THE GENUS EXITIANUS IN NORTH AMERICA INCLUDING MEXICO¹

(HOMOPTERA: CICADELLIDAE)

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The genus *Exitianus* was erected by Ball in 1929² at which time *Cicadula* exitiosa Uhler = obscurinervis Stal was designated as the genotype. At that time Ball included exitiosa Uhler, picatus Gibson and miniaturatus Gibson as synonyms of obscurinervis. Ball later (1936) described kinoanus as belonging to this genus. An examination of the genitalia of this species places it in Ollarianus, the male genitalia being almost exactly the same as those of bullatus Ball.

At the time that Osborn placed *exitiosus* Uhler as a synonym of *obscurinervis* Stal he published illustrations of the male and female made from the Stal types by Madam Ekblom.³ An examination of these illustrations in view of the recent studies of materials raises a question regarding the synonomy of *exitiosus*. As a result, *exitiosus* is re-established as a species in the present treatment.

Several thousand specimens collected in Mexico over the past few years have furnished the basis for a study of the species of this genus using the genitalia as a morphologic index of the diverse color patterns and differences in size. The male genitalia are quite similar in type even in the case of species very different in external appearance. The aedeagus and styles are very similar in all the species examined. The pygofers are similar, but the arrangement of the three large spines is apparently indicative of specific types. The pygofer in a few species is distinctive by being shortened and different posteriorly. The female segments are different in several cases and aid in separating certain species such as *picatus* and *excavatus*. It has not been possible to examine specimens of *digressus* V. D.

In addition to treating the previously described species—obscurinervis, exitiosus, digressus and picatus—nigrens and tricolor are described, two species unique in color and form. Also excavatus and abruptus, two species closely related to picatus, are described; and brevis and angulatus are described as species related to exitiosus. In addition two varietal forms of exitiosus are being described.

In distribution the species are distributed in relation to altitudes. *Exitiosus* is apparently a low altitude species in both the United States and Mexico. The species described as *nigrens* has been taken only at Cordoba at an elevation of about 2000 feet. Another species described as new, *tricolor*, has been taken at sea level and up to about 2000 feet elevation. *Picatus* has been taken at elevations ranging from 1000 feet to 7500 feet elevation while *excavatus* occurs over the same range of elevations except that it has not been taken at elevations of more than 5000 feet. A species which is described as *angulatus* is apparently a high altitude species and has not been taken at elevations of less than 4000 feet and occurs up to the fir forests at 10,000 feet or more, in such localities as Rio Frio and Desierto de Los Liones. All the species of the genus occur on herbaceous vegetation and are found in the meadows and undergrowth of the forest areas.

¹The authors wish to acknowledge with appreciation the assistance obtained from a Grant-in-Aid from the Sigma Xi Research Fund.

²Trans. Amer. Ent. Soc., 55:5, 1929.

³Annals Carnegie Museum, Vol. 15, Plate 57, Oct., 1924.

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THE GENUS

The genus is characterized by a broad, bluntly produced vertex with the margin broadly rounded to the front. The marginal sutures of the clypeus are continuous with those of the front. The appendix of the elytra extend almost around the apical margin. The female ovipositor is usually long, exceeding the pygofer.

KEY TO SPECIES

1.	Almost entirely black in color; pronotum, scutellum and elytra without pale markingsnigrens
	Pale in color with dark markings2
2.	Pronotum orange with a transverse black band on posterior half, scutellum orange,
- '	unmarkedtricolor
	Pronotum pale without a transverse band, scutellum with dark markings
3.	Margin of vertex marked with two large round black spots4
	Margin of vertex without black spotsdigressus
4.	Vertex with a heavy black unbroken band between the eyes
	Band on vertex narrow, paler in color or broken into spots or bars
5.	Female last ventral segment truncate or slightly emarginate with a slight tooth at apex.
	Male pygofer with the spine about half way between ventral and dorsal margins on
	apical portionpicatus
	Female last ventral segment deeply angularly notched almost half way to the base. Spine
	of apical portion of male pygofer near ventral margin
6.	Male pygofer shallowly notched or excavated at about two-thirds its length on dorsal
	margin, apical protrusion of pygofer on dorsal marginexcavatus
	Pygofer shorter, sloping at half its length to caudal rounded tip at middle of pygofer. abruptus
7.	Vertex margin with black spots next the eyesobscurinervis
_	Vertex margin without black spots next the eyes
8.	Male pygofer concavely excavated on dorsal margin near the apex which is longest on
	dorsal margin
	Male pygofer with dorsal margin sloping ventrally from about half its length to form the
~	longest portion at about its middlebrevis
9.	Pygofer spine at about middle of pygofer on apical portionexitiosus
	Pygofer spine on ventral portion at about one-third the distance from the apexangulatus

(Exitianus picatus Gibson)

Athysanus picatus Gibson. Proc. Biol. Soc. Wash. 32:26, 1919.

Athysanus minaturatus (Gib.) Proc. Bio., Soc. Wash. 32:26, 1919.

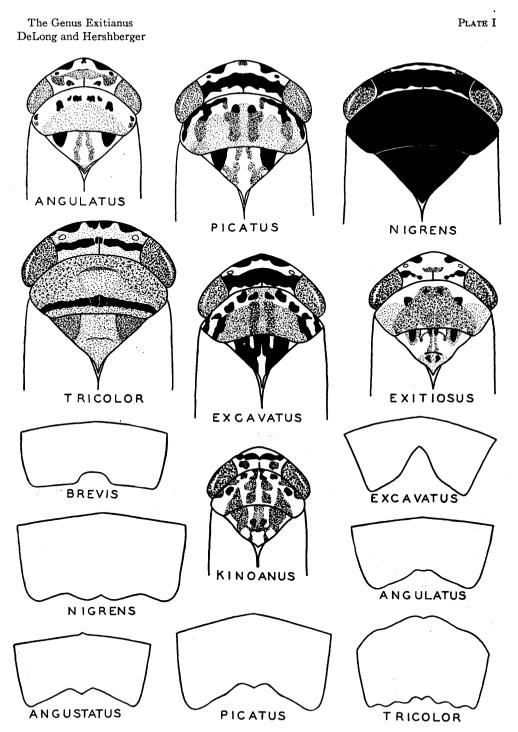
Resembling *exitiosus* in general appearance but with a broad black transverse band between the eyes. Length 3.5–5 mm.

Vertex broad, slightly produced and broadly rounded, twice as broad between eyes at base as median length.

Color: Vertex creamy with a large round black spot just before each ocellus and a pair of minute proximal spots at apex. A transverse black band of median width between the eyes and just back of ocelli. Pronotum pale with a rather large black spot on anterior portion just behind inner margin of each eye. Scutellum pale with a large black triangular spot in each basal angle and a pair of proximal diverging longitudinal lines on anterior median half. Elytra witish subhyaline with brown veins. Face pale brown with short dark brown arcs at each side. A broad median longitudinal black stripe extends from the margin of vertex to the base of the clypeus. Marginal lines of clypeus and genae dark brown.

Genitalia: Female last ventral segment with posterior margin shallowly, broadly and rather evenly excavated between the produced lateral angles. Male valve broad and triangular; plates long, triangular, tapered to blunt apices. Style rather broad at base, tapered to a narrow outwardly curved apical tip. Aedeagus erect with a basal short broad process extending dor-

wiji -



Heads and female last ventral segments of species of Exitianus as labeled and Ollarianus kinoanus.

sally. The apical two-thirds is tapered from a rather broad base to a pointed apex which reaches the dorsal wall of the pygofer and curves anteriorly. The pygofer is elongate with a deep and broad excavation on the dorsal portion just anterior to the apical dorsal lobe. Three prominent spines are on the pygofer two at the apex, the ventral one of which is shorter and broader, and the spine on the apical portion is about half way between the dorsal and ventral margins.

Specimens of this species are at hand from Iguala, Gro., September 11, 1939; Mexico City, November 20, 1938, and September, 1936; Cuernavaca, Mor., September 8, 1939; Balsas, Gro., December 11, 1939; Tierra Blanca, Vera Cruz, July 29, 1932 (M. F. 2655); Vejuca, Gro., September 3, 1930 (M. F. 1790), collected by Dampf, Plummer and DeLong; Jalapa, S. L. P., K-314, Sept. 22, 1945, DeLong, Hershberger, Elliott; Mexcala, Gro., Oct. 2, 1945, Balock, DeLong, Hershberger and Elliott; Tierra Colorado, Gro., October 5, 1945, Balock, DeLong, Hershberger, Elliott; Cuernavaca, Mor., Sept. 25, 1945, Plummer, Shaw, DeLong, Hershberger, Elliott; Zitacuara, Mich., Sept., 1945, Plummer, DeLong, Hershberger, Elliott.

Exitianus excavatus n. sp.

Resembling *picatus* in general appearance but with a more produced vertex, a broader dark band on vertex and with distinct female genitalia. Length 3.5–4.5 mm.

Vertex produced and bluntly angled almost twice as wide between eyes at base as median length.

Color: Pale yellow to white with the black of the upper portion of the face showing as a connecting portion between the two large round black spots on the margin of vertex just before the red ocelli. A broad black band just back of ocelli extends between the eyes and reaches almost to the posterior margin of the vertex. Pronotum with a row of large dark spots on the anterior margin and six longitudinal stripes, the median pair broadest and separated by a narrow pale median line. Scutellum black with a median pale longitudinal spot on the posterior half and four pale longitudinal spots on the anterior margin. There is a small one in each basal angle and one each side about equidistant from each other and from each one in the basal angles. Elytra whitish subhyaline, the veins black. Face black with short pale arcs at either side next antennae, a pale line along clypeus and a pale line along margin of each eye.

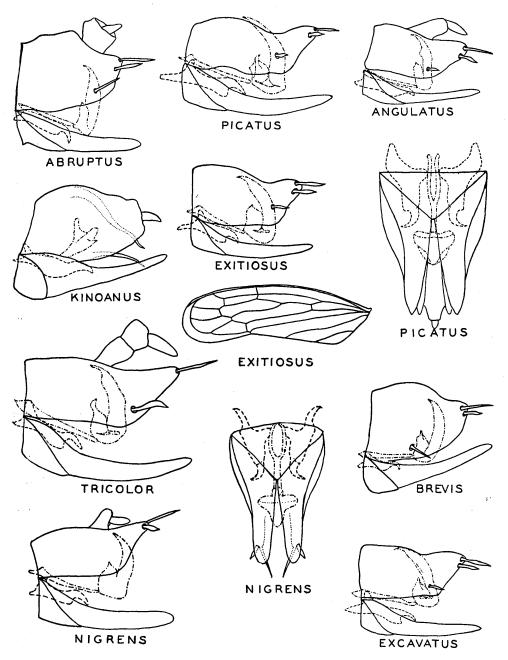
Genitalia: Female last ventral segment with lateral angles prominent, the median third broadly deeply excavated almost half way to the base. The excavation is broad and V-shaped with the apex rounded. Male valve long, triangular; plates long, narrow, blunt at apex, about one-fourth longer than combined basal width. Pygofer elongate, with a broad convex depression on the dorsal portion at about two-thirds the distance from the base with a pair of apical spines on each side, the ventral spine shorter than the dorsal one. A third spine is located about one-fourth the distance from the ventral margin and not far from the posterior margin. The style is rather broad at the base and narrowed to a sharp pointed out-turned apex. The aedeagus is erect with a short broad basal portion and the apical two-thirds is tapered to a sharp pointed apex which is directed anteriorly.

Holotype male collected at Taxco, Gro., September 9, 1939. Allotype female collected at Zamora, Mich., Mexico, on October 2, 1941. Male and female paratypes collected at Jiutepec, Morelos, September 6, 1939; Cuernevaca, Mor., September 8, 1939; Iguala, Gro., September 6, 1939; Acapulco, Gro., September 10, 1939; Chilpancingo, Gro., September 10, 1939; Taxco, Gro., September 9, 1939, collected by Plummer and DeLong. Paratypes from Finca Vergel, Chiapis, May 15, 1935 (M. F. 4177); Tuxtla, Gutierrez, Chiapis, July 2, 1926 (M. F. 1015); Tequila Jalisco. August 24, 1937, collected by Dr. Dampf. A male paratype from Guadalajara, August 27, 1937, was collected by W. E. Stone. Jacala, S. L. P., September 22, 1945, DeLong, Hershberger, Elliott; Necaxa, Pue., October 26, 1945, Stone, DeLong, Hershberger, Elliott.

Exitianus abruptus n. sp.

Resembling *excavatus* in form and general appearance but with the band between eyes narrower, more broken, on posterior margin and male genitalia different. Length, male 4 mm.

The Genus Exitianus DeLong and Hershberger



Male genital structures—lateral view as labeled of species of *Exitianus* and ventral view of *Exitianus picatus* and *Exitianus nigrens*. Also the left fore wing of *Exitianus exitiosus* showing the characteristic appendix at apex.

Vertex produced and bluntly angled, almost twice as broad between eyes at base as median length.

Color: Vertex pale with the two large black marginal spots which are joined by the black from the face extending between them. A rather broad black band extends between the eyes. It is irregular on the posterior margin and sends a spur diagonally posteriorly and medially. The pronotum is pale with irregular dark markings extending longitudinally. Scutellum mostly black with white spots in the basal margins and a pair of white spots either side of middle at base and white markings on apex. Elytra pale with dark veins.

Genitalia: Female last ventral segment broadly, deeply excavated about half way to base, the apex of excavation rather broadly rounded. Male valve broad, triangular, the plates exceeding pygofer in length, tapered to blunt apices. Style broad at base narrowed to apices which are sharp pointed and curved outwardly. Aedeagus erect, tapered to a rather sharp pointed apex which is bent anteriorly. The pygofer is a little longer than broad, narrowed both dorsally and ventrally to a blunt apex which bears a pair of spines at the apex and a long ventral spine about one-fourth the distance from the base on apical fourth.

Holotype male and allotype female collected at Jiutepec, Morelos, September 6, 1939, by DeLong and Plummer.

Exitianus obscurinervis (Stal)

Jassus (Thamnotettix) obscurinervis Stal. Kong. Sven. Vent. Acad. 293, 1858.

This species is apparently closely related to *exitiosus* but according to the illustrations made of the type specimens it is probably distinct. The head is bluntly produced. The margin of the vertex has the two black spots as in *exitiosus* but in addition there is a prominent black spot on the margin next each eye. The band between the eyes is very pale or wanting with prominent spots between the eyes as in *exitiosus*. Length 4–5 mm.

The male and female genitalia are similar in external form to those of exitiosus.

The species was originally described from Buenos Ayres, Rio Janeiro.

Exitianus exitiosus (Uhler)

Cicadula exitiosa Uhler. Amer. Ent. 3:72, 1880.

A pale blunt headed species with a broken dark band between the eyes and two round black spots on the margin of the vertex. Length 3.5-4.5 mm.

Vertex blunt, produced, about twice as long between eyes at base as median length.

Color: Vertex pale with a pair of round black spots on margin about half way between vertex and margin of eye. A small spot at vertex and often a smaller spot either side. Ocelli red. A broken transverse band extending between eyes across middle of vertex. Usually with a darker spot at the terminal portions next each eye and a dark spot on either side at base. Pronotum pale to gray with a row of four conspicuous dark spots on anterior portion parallel with the anterior margin. Scutellum pale, a dark triangular spot on each basal angle and a broken line bifd from median basal portion extending to either side of apex. Elytra pale with dark veins and a few dark lines on clavus.

Genitalia: Female last ventral segment with produced lateral angles between which the posterior margin is broadly shallowly excavated with a slightly produced apical tooth at middle. Male valve broadly triangular. Plates long, rather narrow, tapered to blunt apices. The style is rather broad at base narrowed to a slender outwardly curved apical portion which is sharp-pointed at the tip. The aedeagus has a basal portion which is short and broad and which is contiguous with the longer apical portion which extends dorsally and curves anteriorly at the apex. The pygofer is rather long and slender with a prominent rounded indentation on the dorsal portion just anterior to a bluntly produced apical lobe on the dorso-caudal margin. Three prominent spines are on each side of the pygofer; two at the tip of the apical lobe, the ventral one of which is shorter and broader, and a third spine which is shorter than either of the apical spines is located about halfway between the dorsal and ventral margins a little anterior to the apical margin.

This is apparently the proper name which should be applied to the common species which apparently occurs throughout the United States and extends into Mexico. Specimens at hand from many localities throughout the United States show no specific differences. Some of the Mexican specimens are cited as varietal forms of *exitiosus*.

Exitianus exitiosus var. angustatus n. var.

Resembling exitiosus in general appearance but more slender and elongate with more produced head and different coloration. Length 4.5-5 mm.

Vertex produced and blunt at apex, more than twice as wide between eyes as median length.

Color: Vertex pale yellowish with a large round black spot just before ocellus on each side of middle on margin of vertex, and a minute brownish spot at apex on the margin. A pale brownish band or a broken band extends between the eyes. This is sometimes reduced to spots, one next each eye and an elongate transverse spot on disc. A conspicuous spot either side on base often connected with the spot next the eye. Pronotum yellow to gray with a pair of median spots on anterior margin and a round spot on anterior portion just back of inner margin of the eye. Scutellum with large triangular black spots extending across basal angles. A median longitudinal stripe divides near anterior end and extends across scutellum forming a pair of divergent stripes on apex. Elytra whitish subhyaline, veins black or dark brown. Face pale brown with dark brown arcs usually interrupted at the middle.

Genitalia: Female last ventral segment slightly and broadly excavated on posterior margin between the lateral angles with a very minute median tooth at apex. Male valve triangular; plates long tapered from base to blunt apices. The styles, aedeagus and pygofer are similar to those of *exitiosus*.

Holotype male, allotype female and male and female paratypes collected at Santa Engracia, Mexico, November 8, 1938, by J. S. Caldwell.

Exitianus exitiosus var. pallidens n. var.

A pale form resembling exitiosus but more robust and with different color markings. Length 3.5-5 mm.

Vertex bluntly angled, a little more than one-half times as long at middle as basal width between the eyes. Female more than twice as broad as long.

Color: Creamy with a pair of round black spots, smaller than those of *exitiosus* on the margin of the vertex, just inside ocelli and a small brownish spot at apex; ocelli reddish. A rather narrow pale brownish band extends between the eyes and there is a tiny black spot either side just before the posterior margin. Pronotum pale, the coloration of scutellum showing through on the disc, a small spot just back of inner margin of each eye on the anterior portion. Scutellum creamy with a black triangular spot in each basal angle. Elytra whitish subhyaline, veins pale brown, the median vein on clavus conspicuously brown. Face yellowish with numerous arcs. Those on upper portion of face almost continuous, the veins on the lower portion broadly interrupted at middle.

Genitalia: Female last ventral segment almost truncate, broadly, shallowly excavated from lateral angles to a short, broad, rounded median tooth at apex. Male valve short, triangular; plates long and narrow, about one-fourth longer than combined width at base, tapered to blunt apices. The styles, aedeagus and pygofer are similar to those of *exitiosus*.

Holotype male, allotype female and male and female paratypes collected at Valles, S. L. P., Mexico, August 28, 1939, and paratypes from Tamazunchale, S. L.,P., August 29, 1939, by D. M. DeLong.

Exitianus angulatus n. sp.

Resembling exitiosus in general appearance and coloration but with more produced vertex and female segment notched medially. Length 4 mm.

Vertex rather strongly produced and bluntly angled, not twice as wide between eyes at base as median length.

Color: Creamy, vertex with a pair of large round black spots on margin just before reddish ocelli and a small brownish spot at apex. A curved black transverse band, enlarged next each eye, extends between the eyes. The enlarged portion next each eye is connected with an oblique elongated spot extending medially and basally to pronotum. The discal portion of the pronotum is dark and there is a row of rather large irregular black spots on the anterior portion of the pronotum. Scutellum pale, a large black spot in each basal angle. A pair of proximal round black spots at middle and another pair posterior to these just behind the transverse median line. Elytra white subhyaline, veins brown or black. Face pale brownish with dark brown arcs which extend entirely across the face above but are only on the lateral portions of face below.

Genitalia: Female last ventral segment with produced angles between which the posterior margin is sinuate either side of a broad, shallow median rounded notch greater than the width of the ovipositor. Male valve broad and triangularly produced. Plates long and narrow, tapered to blunt apices. Pygofer long and narrow with the concave excavation on the dorsal margin just before apex. There is a pair of spines on the blunt rounded apex. The ventral spine is shorter than the dorsal one. A third spine is on the ventral portion just above margin about one-third the distance from apex. Aedeagus erect with the apex pointed.

Holotype male, allotype female and male and female paratypes collected at Mexico City, D. F., November 20, 1938, by J. S. Caldwell; Toluca Rd., Mexico, November 24, 1938, by J. S. Caldwell; Mexico City, D. F., 18 kms. west, September 1, 1939, and 43 kms. south, September 5, 1939, by DeLong; Mexico City, D. F., September 16, 1936, by W. E. Stone; Jacala, S. L. P., K-314, Sept. 22, 1945, DeLong, Hershberger and Elliott; Tulancingo, Hdg., K-129, October 25, 1945, Stone, DeLong, Hershberger, and Elliott; Rio Frio, D. F., K-65, Oct. 10, 1945, Shaw, DeLong, Hershberger, Elliott; Morelia, Mich., September 30, 1945, Plummer, DeLong, Hershberger, Elliott; Desierto de los Leones, D. F., October 9, 1945, DeLong, Hershberger and Elliott; Rio Tuxpan, Mich., September 29, 1945, Plummer, DeLong, Hershberger, Elliott; Cuernavaca, Mor., September 25, 1945, Plummer, Shaw, DeLong, Hershberger, Elliott; Mexico City, D. F., October 22, 1945, DeLong, Hershberger, Elliott; Zitacuara, Mich., September, 1945, Plummer, DeLong, Hershberger, Elliott:

Exitianus brevis n. sp.

Resembling *angulatus* in general appearance and coloration but with female segment almost truncate with a median shallow excavation and male pygofer short without a dorsal concave emargination. Length 4-5 mm.

Vertex bluntly angled, not quite twice as wide between eyes as median length.

Color: Vertex pale with a pair of large round black spots on anterior margin between which is a smaller spot at apex. The band between the eyes is narrow, broadened on median half, curved anteriorly and sometimes paler in color at middle. A spot either side at base is sometimes connected with the band next the eye. Pronotum with a row of six black spots on anterior margin between the eyes. Scutellum pale with a black triangular spot in each basal angle and a pair of divergent longitudinal stripes at middle which are contiguous at the base and reach the posterior margin on either side of apex. Elytra pale with dark veins.

Genitalia: Female last ventral segment almost truncate on the posterior margin with a rather narrow, shallow, concavely rounded excavation at the middle. Male valve triangular; plates longer than pygofer, elongate, tapered to blunt apices. Style broad at base narrowed to a sharp pointed apex which is curved outwardly. Aedeagus erect, with a short basal portion and a long apical portion which is tapered to a sharp pointed apex; both portions are directed dorsally. The pygofer is short and broad at base, the dorsal margin is concavely narrowed and the ventral margin convexly narrowed at about half its length to form a bluntly pointed apex which bears two prominent spines, the ventral one of which is shorter. A third spine is on the ventral margin at more than half the length of the segment.

Holotype male, paratype male and females collected at Mexico City, D. F., Mexico, November 20, 1938, elevation 7500 feet, by J. S. Caldwell. Allotype female collected at Mexico City, D. F., 43 kilometers south at an elevation of 10,000 feet, September 5, 1939, by Plummer and

No. 3

DeLong. Paratype female collected on the Toluca Road, 18 kilometers west of Mexico City, September 1, 1939, by D. M. DeLong.

Exitianus digressus (Van Duzee)

Athysanus digressus V. D. Calif. Acad. Sci. 21:32, 1933.

In general form and appearance resembling *exitiosus* but without the black spots on the margin of vertex. Length 4 mm.

Vertex bluntly rounded, more than twice as wide between eyes as median length.

Color: Pale without marginal black spots, the darker forms with a crescent on the vertex above the location of the spots. The band between the eyes is produced anteriorly in triangular form. Elytra pale with pale nervures.

Genitalia: Female last ventral segment with posterior margin feebly sinuate. The male plates long, tapered to blunt apices.

This species is known only from Islands in the lower California region, Chatham Island, James Island and North Seymour Island.

This species has not been available for study but is apparently closely related to obscurinervis.

Exitianus tricolor n. sp.

Resembling exitiosus in general form but with distinct coloration and genitalia. Length 5-6 mm.

Vertex broadly rounded, scarcely produced, appearing almost parallel margined.

Color: Vertex creamy with a large black spot just before each ocellus on the margin, a pair of smaller proximal spots on margin at apex and a minute spot next each eye. A rather narrow transverse black hand, slightly interrupted at middle extending between the anterior margins of the eyes. Pronotum with an anterior marginal band covering the anterior third. The posterior portion pale with a black transverse band about two-thirds the distance from the anterior margin. Scutellum reddish brown unmarked. Elytra milky white with black veins. Face pale with short brown arcs at either side of face. A rather broad median black band extending from margin of vertex to apex of clypeus. A marginal brown line extends from antennal socket along margins of face and clypeus and a marginal brown line between the lorae and genae.

Genitalia: Female last ventral segment with posterior margin slightly slopingly produced to a faint median notch. Male valve triangular, plates long, tapered to blunt apices. Styles rather broad at base tapered to narrow apices which are curved outwardly and pointed at tip. Aedeagus in lateral view rather broad, bent near base and curved dorsally extending to dorsal portion of pygofer. Apical portion tapered to a pointed tip which is bent anteriorly. Pygofer long and narrow, constricted on dorsal margin anterior to the produced bluntly pointed apex. A long spoon-shaped, spine-like structure arising below middle on ventral apical portion and extending posteriorly. A long single spine is at tip of apex.

Holotype male, allotype female and male and female paratype collected at Buena Vista, Gro., October 23, 1941 (K-340) by Good and DeLong. Male paratypes collected at Acapulco, Gro., November 22, 1938, by Caldwell and a male paratype collected by Dr. Dampf at La Libertad near Flores Peten, Guat., swept from grass in a Savanna region November 23, 1935 (M. B. 146).

Exitianus nigrens n. sp.

A black robust species with few pale markings. More robust and shorter than exitiosus and with entirely different coloration. Length 5 to 5.5 mm.

Vertex broad and broadly rounded, appearing parallel margined only slightly produced at middle.

Color: Black. There is a rather broad white band extending between the ocelli just above the anterior margin and a white marginal band on base of vertex. This gives the appearance of a broad black band between the eyes covering most of the vertex behind the ocelli. The

pronotum, scutellum and elytra are shining black unmarked. Face shining black with about four pale spots on lower portion. Beneath black.

Genitalia: The female last ventral segment is almost truncate. The posterior margin is sinuate either side of the median third which is slightly produced and faintly notched at the middle. Male plates slender, elongate; apices distinctly rounded. Valve triangular, extending about to apex of styles. The style is broad at base, gradually narrowed to pointed apex which is bent outwardly. Aedeagus resembling that of obscurinervis. There is a short, basal, dorsally produced process which is broad and fits against the dorsally produced apical portion. The latter is rather broad at the base and tapers to a pointed apex which is bent cephalad. The pygofer is concavely narrowed before the apex both ventrally and dorsally to form a narrow protruded apical portion at the tip of which there is a long slender spine just dorsal to a short broad thumb-like spine.

The holotype male and allotype female were collected at Cordoba, Vera Cruz, October 8, 1941, by Good, Plummer, Caldwell and DeLong.

Ollarianus kinoanus (Ball)

Exitianus kinoanus Ball, Bull. of Brooklyn Ent. Soc. 31:72, 1936.

In general appearance and coloration, resembling *exitiosus* but without the apical appendix and other characteristics of *Exitianus*. Length 4 mm.

The vertex is similar in length and width to exitiosus and is broadly, bluntly produced.

Color: Pale brownish marked with black and dark brown spots and blotches. A pair of black spots on margin are similar to those of species of *Exitianus*. A transverse band between these crosses the vertex before the anterior margin of the eyes. A pair of dark blotches on the basal portion near the eyes. Elytra white, subhyaline; brown nervures.

Genitalia: Female last ventral segment with the median fourth triangularly produced on the posterior margin. Male plates rather broad at base narrowed and produced to form long, attenuate, slightly divergent apices. The internal structures are almost exactly like those of Ollarianus bullatus. The aedeagus is short and broadened at apex with an anterior median and slight posterior processes. The pygofer bears a long dorsal process which arises before the middle and extends caudally and ventrally and tapers to a pointed apex. The ventral process arises at about the middle and extends caudally and ventrally and ventrally and is shorter than the dorsal process.

Although Dr. Ball described this species as belonging to *Exitianus*, the similarity of the male genital structures to *strictus* and especially *bullatus* leaves little doubt that it should be placed in that genus. It has been taken only in the southwest United States in Tucson and other proximal localities and at Kino Bay, Sonora, Mexico.