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NOTES ON SOME ASSASSIN BUGS OF THE GENUS
ZELURUS FROM THE COLLECTIONS OF THE UNITED
STATES NATIONAL MUSEUM

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THROUGH the kindness of Dr. Reece I. Sailer, of the United States Bureau of Entomology and Plant Quarantine, we were given the opportunity of examining a small collection of assassin bugs of the genus *Zelurus* Hahn, 1826 (*Spiniger* auct.) from Central and South America. Three species new to science are described herein, and additional morphological notes and locality records of other species are given. We would welcome any additional material of this genus for study.

ZELURUS THORACICUS (Lepeletier and Serville, 1825)

1 ♂, Viçosa, Minas Gerais, Brazil, collected by E. J. Hambleton on December 11, 1930.

ZELURUS CIRCUMCINCTUS (Hahn, 1835)

1 ♂, 1 ♀, Barro Colorado Island, Panama, Canal Zone, collected at light, in May 1941, James Zetek No. 4798, Lot No. 41-11389.

ZELURUS COXALIS (Stål, 1859)

1 ♀, Rio de Janeiro, Brazil, Uhler det. *Spiniger limbatus*, Uhler collection.

ZELURUS STILLATIPENNIS (Stål, 1859)

1 ♂, São Paulo, Brazil, collected by H. L. Parker.

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ZELURUS MORDAX (Breddin, 1903)

PLATE 4, FIGURES 1-3

1 ♀, Yurimaguas, Peru, collected by H. S. Parish in March 1920.

The original description is quite sufficient, but in order to facilitate comparison we include drawings of the general aspect of the head (pl. 4, figs. 1 and 2), as well as of the color pattern of the species (fig. 3).

ZELURUS PINTOI (Costa Lima, 1940)

3 ♂♂, Villa Rica, Paraguay, collected by F. Schade in October and November 1934.

ZELURUS JURADOI (Costa Lima, 1940)

PLATE 4, FIGURES 4-7

1 ♀, Tumupasa, Bolivia, collected by W. M. Mann in December 1921 (Mulford Biological Exploration 1921-1922).

The specimen at hand corresponds quite well with the original description. We herewith supplement the diagnosis by including drawings of the general aspect of the head as well as of the clasper and the aedeagus; the form of the basal sclerite of the phallosome is significant.

ZELURUS ? BERGROTHI Lent and Wygodzinsky, 1946

PLATE 5, FIGURES 8, 9

Micropterous female.—Total length, 15.0 mm.; distance between points of humeral spines, 3.5 mm.; maximum width of abdomen, 5.5 mm.

General color of body black. Antennae, corium of microhemelytra except clavus, tibiae except a short basal dark ring, and tarsi orange-colored. The posterior tibiae are lacking in the specimen examined. Connexivum totally yellowish dorsally and ventrally. Bristles very scarce.

General form of head and rostrum as in plate 5, figures 8 and 9. Distance between eyes dorsally $1\frac{1}{2}$ times the width of one eye as viewed in the same plane. Jugae prominent, pointed apically. Genae rounded apically. Length of first segment of antennae, 1.5 mm.; of second, 3.5 mm.

Anterolateral angles of collum laterally produced but not very prominent. Anterior lobe of pronotum with 1+1 strong, rather short, discal spines, as well as 1+1 lateral processes, which are shorter than the discal ones. Both sets are longer than the processes of the collum. Humeral angles with short, strong, acute spines (one shorter than the other in the specimen examined), their length about equal to that of the discal and the lateral spines of anterior lobe. Anterior

lobe smooth, posterior lobe irregularly wrinkled. Median longitudinal groove occupying almost the whole anterior lobe of pronotum, originating at level of bases of discal spines and thus also occupying the anterior three-fourths of the posterior lobe. Distal spine of scutellum strong, acute, being the longest of all thoracic spines. Prosternal processes not very prominent.

Legs of medium length. Femora ventrally without any traces of denticles. Spongy fossa occupying one-third of the total length of the anterior tibia. Femora and tibiae with few bristles, the length of which is not greater than the diameter of the respective structures.

Microhemelytra not reaching posterior margin of second tergite; length, 2.5 mm. Dorsal gland openings conspicuous at posterior border of third, fourth, and fifth segments; a small median tubercle posteriorly on sixth segment. Connexivum inconspicuous dorsally, distinct ventrally. Median longitudinal keel and sutures between ventral segments inconspicuous.

Locality.—Córdoba, Argentina (W. M. Davis).

The specimen differs from *Z. bergrothi* Lent and Wygodzinsky in pronotal and abdominal characters (these may be the result of its brachypterous condition), but chiefly in its pointed jugae, which are similar to those found in *Z. femoralis* (Stål, 1854). However, it seems to us to be more closely related to the former, and therefore we consider it tentatively as the female of *Z. bergrothi*.

ZELURUS SALYAVATOIDES, new species

PLATE 5, FIGURES 10-12; PLATE 6, FIGURE 26

Female.—Length to apex of hemelytra, 12.5 mm.; distance between points of humeral spines, 4.5 mm.; maximum width of abdomen, 4.0 mm.

General color of body pale yellow, partly orange-yellow, with dark piceous design on its surface, as in plate 6, figure 26; only the antennae and the third segment of rostrum uniformly dark piceous.

General form of head as in plate 5, figures 10 and 11; distance between eyes dorsally $1\frac{1}{2}$ times the width of one eye, as viewed in this plane. Anteocular and postocular region separated dorsally by a deep transverse groove. From the center of this groove there arises another short groove directed anteriorly. Jugae and genae rounded apically, not very protruding. Color of head dorsally, yellowish; base of ocelli and the above-mentioned grooves dark brown; laterally with dark-brown stripes before and behind the eyes; the bristles are long, delicate, and erect.

Length of first segment of antennae, 1.0 mm.; proportion of segments one to four, 1:3:2.8:2.4. Rostrum as in plate 5, figure 11; basal half of first segment yellow, apical half dark piceous; the apical two-

thirds of second segment dark-colored; the third segment entirely dark.

Neck with a large dark-brown spot on its posterior half.

Collum with its anterolateral angles quite salient, as in plate 5, figure 10; its color yellow, a median transverse spot dark brown.

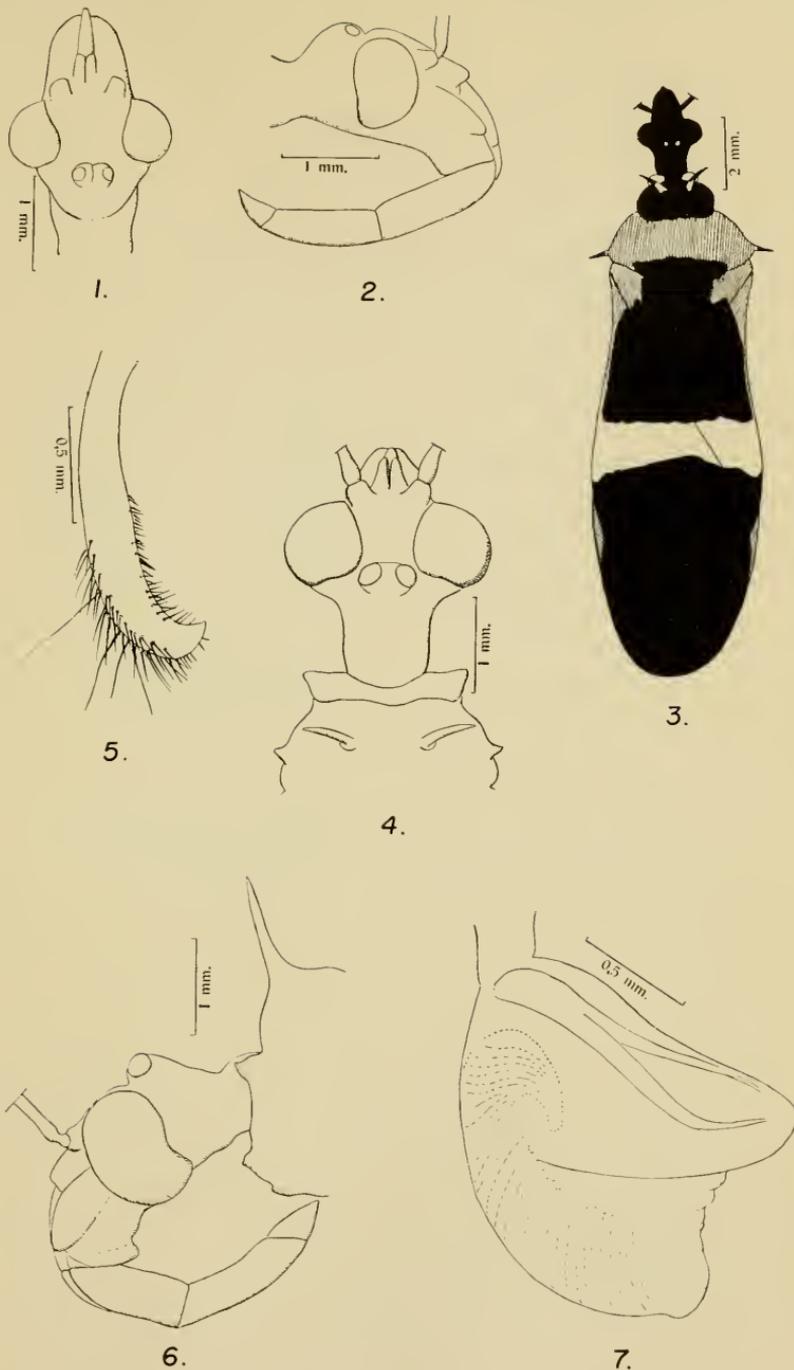
Anterior lobe of pronotum without lateral spines or tubercles; discal spines very long and slender (length, 1.5 mm.), almost vertical. Color of this lobe entirely yellow, only the discal spines and their base brownish. Posterior lobe yellow, with brownish design as in plate 6, figure 26. Humeral angles directed upwardly and backwardly, approximately as long as discal spines of anterior lobe, uniformly dark piceous. Median longitudinal impression occupying the whole anterior lobe of pronotum; the longitudinal carinae short, beginning behind the discal spines and terminating near the base of posterior lobe; the latter with very numerous transverse or irregular wrinkles. Prosternal processes distinct, not very long. Mesosternum with a median Y-shaped carina; metasternum with a transverse carina. Pleura very hairy; hairs long, delicate, and brightly colored. Sterna with similar pubescence.

Scutellum yellow, with a large, median, longitudinal, dark-brown stripe, which reaches and surpasses base of posterior spine; the latter is almost vertical, yellow on its distal two-thirds, and with a total length corresponding to that of the pronotal spines.

Legs slender, not very long, the posterior ones the longest. Ventral face of anterior femora with two longitudinal parallel rows of small dentiform processes, a few noticeably larger than the majority; the rows begin near base and attain the apex; median femora similar. Anterior and median tibiae with numerous small dentiform processes; spongy fossa occupying one-fourth of total length of anterior tibia. Tibia with strong dark bristles, the length of which is two to three times the diameter of said structure. Color of legs distinctly yellow or orange, with brownish annuli. Anterior and median femora with one median, one subapical, and one apical dark ring; posterior femora with one median and one apical ring; tibiae of all pairs with one submedian and one apical dark ring.

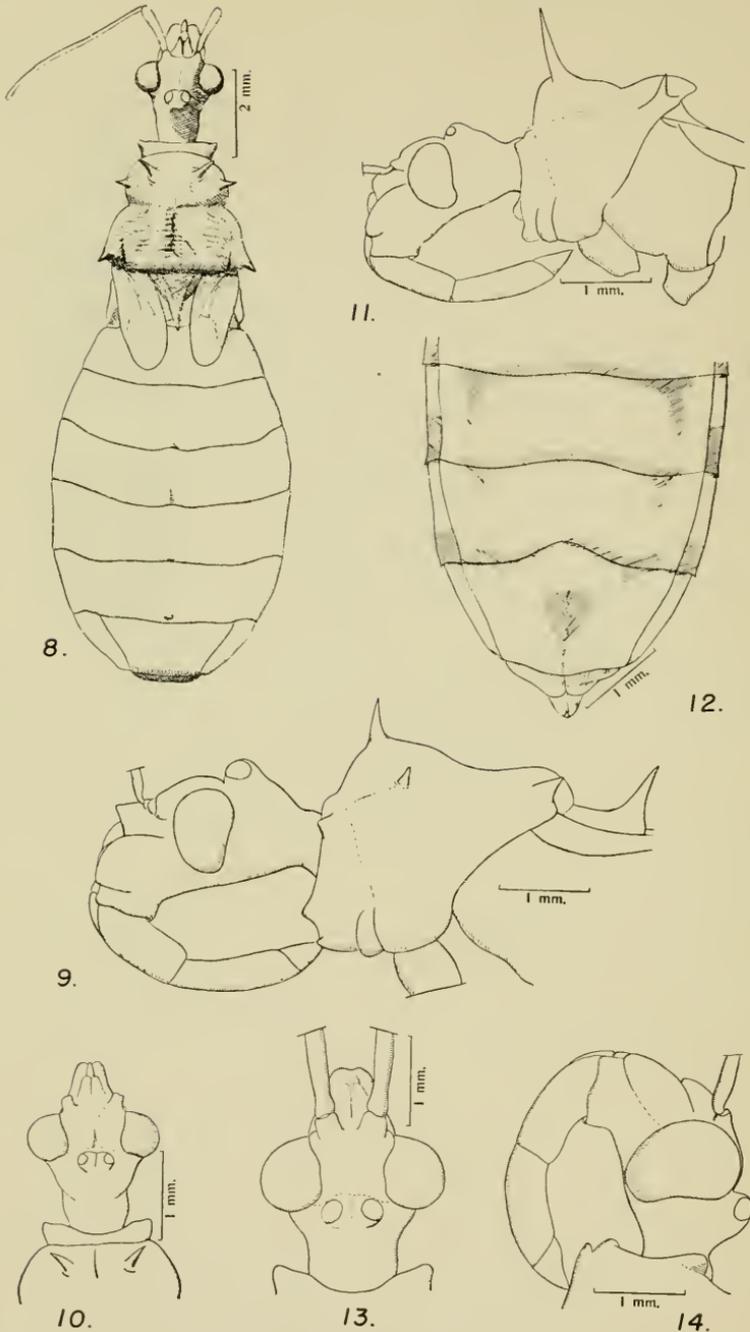
Hemelytra attaining apex of abdomen; their design is shown in plate 6, figure 26.

Median longitudinal keel on ventral face of abdomen attaining base of third segment. Connexival margin of second segment with a very small tooth. Delicate long hairs present, not very numerous. General color of ventral face of abdomen pale yellow; sutures between third and fourth, fourth and fifth, fifth and sixth, and sixth and seventh segment accompanied by a transverse dark band, bifurcate at its lateral ends, as in plate 5, figure 12; seventh segment medially

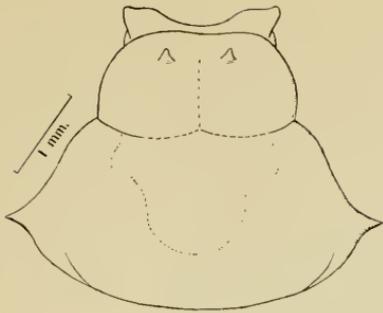


1-3, *Zelurus mordax* (Breddin): 1, Dorsal aspect of head; 2, lateral aspect of head; 3, dorsal pattern.

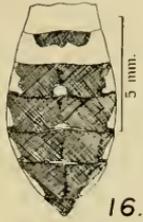
4-7, *Zelurus juradoi* (Costa Lima): 4, Dorsal aspect of head and anterior part of pronotum; 5, clasper; 6, lateral aspect of head; 7, lateral aspect of phallosoma.



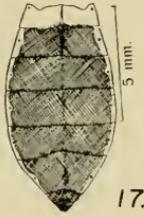
- 8, 9, *Zelurus ? bergrothi* Lent and Wygodzinsky: 8, Dorsal aspect; 9, lateral aspect of head and prothorax.
- 10-12, *Zelurus salyavatoides*, new species: 10, Dorsal aspect of head and anterior lobe of pronotum; 11, lateral aspect of head and prothorax; 12, dorsal aspect of posterior region of abdomen.
- 13, 14, *Zelurus manni*, new species: 13, Dorsal aspect of head; 14, lateral aspect of head.



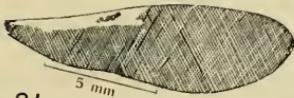
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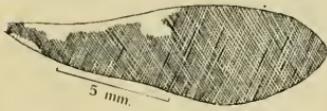
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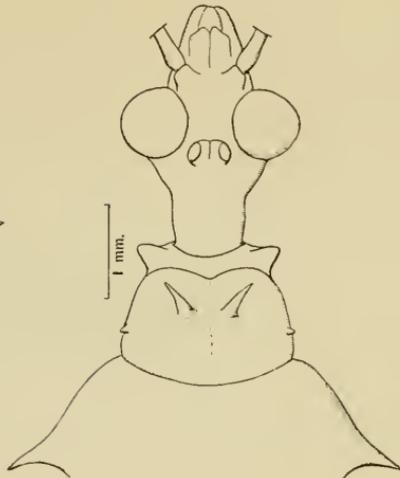
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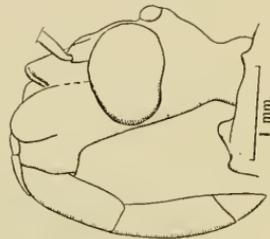
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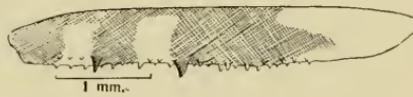
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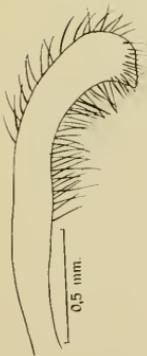
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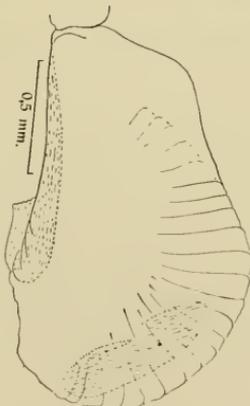
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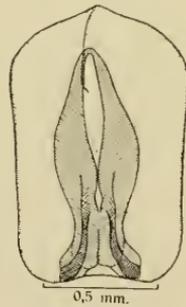
20.



23.



24.



25.

15-17, *Zelurus manni*, new species: 15, Dorsal aspect of pronotum; 16, dorsal aspect of abdomen; 17, ventral aspect of abdomen.

18-25, *Zelurus saileri*, new species: 18, Dorsal aspect of head and pronotum of male; 19, lateral aspect of head of male; 20, anterior femora of male; 21, color pattern of hemelytra, male; 22, color pattern of hemelytra, female; 23, clasper; 24, lateral aspect of phallosoma; 25, basal sclerite of phallosoma.



26



27



28

26, *Zelurus salyavatoides*, new species: Holotype, male.
27, *Zelurus manni*, new species: Holotype, male.
28, *Zelurus satleri*, new species: Holotype, male.