# Uňuraun Nussam ovitates 

PUBLISHED BY THE AMERICAN MUSEUM OF NATURAL HISTORY CENTRAL PARK WEST AT 79TH STREET, NEW YORK 24, N.Y.

# New Genera and Species of Neotropical Discocephaline and Halyine Pentatomids (Heteroptera, Pentatomidae) 

By Herbert Ruckes ${ }^{1}$

The following descriptions are based on specimens that have been residual in the collections of the American Museum of Natural History for some years past. Only one new species (Platycarenus kormilevi) is described from borrowed material.

In this article the author may be criticized for the rather lengthy descriptions of the genera. It is the feeling, however, that a detailed listing of characteristics whereby one genus may be distinguished from another, particularly a close relative, is by no means a faulty procedure; rather it may, and in many instances does, lead to a better interpretation of the generic concept.

At the present time there is some question in the minds of hemipterists regarding the proper placing of genera in the tribes Discocephalini and Halyini. The characteristics that demark the limits of these two categories are by no means clear cut and mutually exclusive. Some genera currently placed in the Halyini may, after more intensive study, be transferred to the Discocephalini. The genera Platycarenus Fieber and Neodine Kirkaldy are accepted as belonging to the Discocephalini. But it is with some reservation that Miopygium Breddin, Lincus Stål, and the new genera Minilincus, Vauriana, Zimmeria, and Brachelytron, herein described, are retained or placed in the Halyini. Further investigation may show that not all belong there.

[^0]In the following descriptions the various numerical ratios are dimensions measured through a binocular microscope with a $\times 2$ objective and a $\times 9$ ocular fitted with a micrometer scale divided into 200 linear units. They are not in terms of millimeters except as mentioned in connection with holotypes and allotypes.

I wish to tend my sincere thanks to Mrs. Rose Ismay for typing the manuscript of this article and to Miss Marjorie Statham for making the outline drawings that accompany it. All figures are drawn to the same scale.

## TRIBE DISCOCEPHALINI FIEBER, 1861

Platycarenus (Discocephalessa) nigroventris, new species
Closely allied to Platvcarenus humilis (Herrich-Schaffer) but larger, much more coarsely and unevenly punctured, and with greater dorsal surface irregularity. Elongate ovate, moderately convex above, less so below, the head and anterior third of pronotum very weakly declivous. Testaceous above, with reddish fuscous to piceous punctures.

Head slightly wider between the eyes than long medianly ( 90 by 80 ), evenly punctured, with no lineation or blotching evident; eyes semipedunculate, subglobose, and protruding; lateral margins weakly reflexed, abruptly sinuate before the eyes, forming a stout, triangular, anteocular lobe on each side, the anterior margin of which is at right angles to the axis of the head; from there on the margins subparallel to a very broadly rounded apex; juga longer than the tylus and narrowly overlapping, a small notch between them at the extreme apex; ocelli small, one and one-half times as far apart as each ocellus is from its adjacent eye; antennae less than half of the length of the body, basal four segments testaceous, delicately infuscated centrally, basal half of the terminal segment sordid ivory, apical half light brown; all segments finely setose; segmental ratios $20 / 33 / 34 / 45 / 50$, i.e., segment II longer than I and subequal to III.

Pronotum almost two and a half times as wide across the humeri as long medianly ( 220 by 90 ), a pronounced shallow, transverse sulcus across the middle, the hind wall of which is coarsely and irregularly subcalloused pale testaceous; punctures for the most part fuscous, rather regular in size but irregularly distributed in very vague, broad, diverging bands from anterior to posterior across the disc; anterolateral margins weakly arcuate and much more explanate than in $P$. humilis, ending posteriorly in a small denticle just before each humerus and anteriorly in very bluntly rounded corners that extend laterally slightly beyond the outer margins of the eyes.

Scutellum a little more than one-third longer than wide at the base (180 by 140); basal third somewhat irregularly but weakly elevated, the basal angles piceous and finely pitted; these followed posteriorly by a small raised area which in turn is followed, along the lateral margins, by a small cluster of congested piceous punctures; no other distinctive markings on the disc; all other punctures fuscous or reddish fuscous, rather uniform in size and rather evenly distributed; apex narrowly rounded but not acute, reaching the middle of the fifth abdominal tergite. Hemelytra quite evenly and moderately punctured; a prominent, smooth, oblong testaceous, discal spot on each corium; the apical margin of the latter straight and the external angle reaching the base of the sixth tergite; membrane pale brown, almost opaque, not quite attaining the apex of the abdomen. Connexivum testaceous, narrowly exposed, the segmental incisures bounded on each side by a narrow band of reddish fuscous, the plates sparingly punctured; apical segmental angles not at all produced.

Bucculae not at all elevated anteriorly and only weakly so posteriorly, and there somewhat divergent. Rostrum long, the apex of the second segment reaching the metacoxae, the apex of the fourth segment attaining at.least the base of the sixth abdominal sternite; all segments sordid yellow, only the extreme tip fuscous (in humilis the second segment barely attains the mesocoxae and the apical one reaches only to the middle of the third sternite); prosternum widely but deeply excavated; mesosternum somewhat tumid and longitudinally shallowly and broadly sulcate; metasternum hexagonal and shallowly excavated. Acetabula, legs, irregular areas on the under side of the head and on the thoracic pleura, and a marginal band between the spiracles and the edge of the abdomen sordid yellow or testaceous; remaining portions of head, thorax, and abdomen piceous; femora marked with coalescent ferruginous circular spots, these on the tibiae becoming arranged in vague, narrow, transverse bands. Median rostral furrow on abdominal venter extended through the fifth sternite, the disc each side vaguely and irregularly rugose, finely punctured laterally.

Surface of the male genital segment below the apical margin deeply and irregularly excavated to form a lunate sulcus that reaches dorsally into the lateral lobes of the segment; heads of the parameres (claspers) hook-like in lateral aspect, their tips overreaching the apical margin of the cup. Basal plates of the female genital valves trapeziform in outline, their apical margins truncate, the mesal margins slightly reflexed so that, when the valves are closed, a dual carina is formed medianly.

Described from four specimens.

Holotype: Male: 10.5 mm . long; 5.5 mm . wide across the humeri; 6.0 mm . wide at the greatest abdominal width; Costa Rica; December 2, 1928. Taken from bananas. Deposited in the American Museum of Natural History.

Allotype: Female: 11.5 mm . long; 6.0 mm . wide across the humeri; 6.5 mm . wide at the greatest abdominal width; Costa Rica; January 23, 1928. Taken from bananas. Deposited in the American Museum of Natural History.

Paratypes: Three females: Same data as above, collected December 10, 1927.

As stated above, this species is closely related to Platycarenus humilis (Herrich-Schaffer) but differs in size, irregularity of upper surface, greater sinuosity of the margin of the head before the eyes, more broadly rounded apex of the head, greater amount of calloused area on the pronotum, more extensive distribution of piceous coloring on the venter so that most of the abdominal disc is black, and the very long rostrum and rostral furrow. There is a good deal of similarity in the male genitalia of the two species, still further indicating their close affinity.

## Platycarenus (Discocephalessa) kormilevi, new species

More broadly oval than allied species in this genus, and more subcalloused and more sparingly punctured. Punctures fuscous to reddish fuscous on a testaceous or sordid yellow background. This species shows attributes of a number of allied forms.

Head more than one and one-half times as wide between the eyes than long medianly (110 by 70) and only slightly shorter than the pronotum; margins obtusely lobed before the eyes, then moderately sinuate to a broadly and evenly rounded apex; about two-thirds of the margin just before the eyes is dark fuscous; juga longer than the tylus and broadly overlapping apically, the apex of the tylus barely exceeding the middle of the cranial disc; punctures irregularly distributed between numerous small calloused areas; ocelli exceptionally small, almost invisible, and just as far apart as each ocellus is from its adjacent eye; antennal ratios: $20 / 30 / 35 /-/$, i.e., segment II longer than segment I but slightly shorter than segment III, segments IV and V missing; basal three segments pale, with a scattering of a few fuscous punctures on segments I and II.

Pronotum about two and a half times as wide across the humeri as long medianly ( 190 by 75); anterolateral margins weakly convex arcuate and terminating bluntly just before the slightly tumid humeri; a weak,
narrow, arcuate sulcus just behind the central portion of the anterior margin, much as in P. politus (Signoret), but the margin before the sulcus is here punctured; a broad shallow transverse impression divides the pronotal disc into anterior and posterior halves; punctures uniform in size, scattered centrally between numerous irregular calloused areas and concentrated on the lateral quarters; humeri concolorous with the disc.

Scutellum about one-sixth longer than wide at the base ( 140 by 120); punctures wide-spaced between irregular levigate areas, a few congested punctures at each basal angle; three medium-sized, subcalloused, sordid yellow or testaceous spots across the basal margin, one median and one near each basal angle; lateral margins sinuate, the frenum ending at the middle; apex moderately rounded and reaching the base of the sixth abdominal tergite. Outer margin of each hemelytron distinctly and obtusely bent opposite the base of the second abdominal segment and there forming the greatest width of the body; free apical margin, at the base of the membrane, essentially straight or very weakly arcuate, the external apical angle obtusely rounded and reaching the middle of the sixth tergite; embolium very wide, almost as wide as the corium and more evenly and densely punctured; membrane infuscated basally, pale apically, the veins not at all prominent. Connexivum widely exposed from the third segment onward, punctures reddish and evenly distributed; a small marginal infuscation on each side of the incisures, the apical angles rectilinear and weakly produced.

Bucculae very low, hardly visible, their margins sinuate and divergent posteriorly. Basal rostral segment stout, short, not reaching the procoxae; remaining segments thin, the apex of segment II attaining the mesocoxae, segment IV two-thirds of the length of segment III, its apex not exceeding the posterior margin of the second abdominal sternite. Venter glossy, testaceous or sordid yellow. All pleura moderately but irregularly punctured. Prosternum weakly excavated between the acetabula; mesosternum somewhat tumid and very weakly longitudinally sulcate; metasternum small and narrow, almost rhomboidal, weakly carinate anteriorly and shallowly and narrowly longitudinally sulcate posteriorly. Legs testaceous or sordid yellow, femora fuscopunctured on their apical halves; tibiae provided with a few fuscous spots along their dorsal margins. Abdominal disc impunctate centrally and coarsely punctured laterally, the punctures diminishing in size beyond the spiracles, there becoming pale red and ending before the abdominal margin.

In the male the sixth abdominal sternite is produced forward very
acutely, almost acuminately, beyond the middle of the abdomen and there almost cutting the fifth sternite into two lateral plates. The upper margin of the male genital segment is provided with a pair of posterior projecting rectangular lobes, each of which is more than twice as wide as long; these lobes overlie the dorsal surface of the parameres (claspers); the ventral margin is weakly trisinuate, below which the ventral surface of the segment lies in a more or less vertical plane and is somewhat undulating; the lateral lobes are quite small, triangular, and produced posteriorly; the parameres or claspers are proportionately enormous, protruding well beyond the boundaries of the segment; the heads are irregularly globose, with a few scattered conical points, suggestive of the head of a war club or medieval mace; the upper surface of each head is black, unevenly flattened, and squarish. The basal plates of the female genital valves are placed in a somewhat oblique vertical plane, their surfaces conspicuously punctured; they are wider than long, the surfaces being impressed mesally and there contiguous only basally.

Described from two specimens.
Holotype: Male: 8.0 mm . long; 4.75 mm . wide across the humeri; 5.5 mm . wide across the subbasal width of the elytra; Rio de Janeiro; April, 1946. In the collection of Nicholas A. Kormilev.

Allotype: Female: 8.75 mm . long; 5.0 mm . wide across the humeri; 6.0 mm . wide across the subbasal width of the elytra; Rio de Janeiro; November, 1947. In the collection of Nicholas A. Kormilev.

In a small collection of discocephaline pentatomids lent to me for identification by Dr. Nicholas A. Kormilev, these two specimens appeared. I take this opportunity of dedicating them, as a new species, to Dr. Kormilev.

The presence of a pair of rectangular lobes on the upper margin of the male genital segment shows relationship to $P$. clypeatus Stål and $P$. tenebricornis Ruckes, in which similar lobes, but of different proportions, occur. The transverse impression across the pronotal disc, however, suggests affinity to $P$. humilis (Herrich-Schaffer), while the narrow arcuate sulcus near the anterior margin, which sets off a "collar" behind the head, appears to show relationship to P. politus (Signoret). The relatively large amount of calloused surface, especially on the pronotum, indicates some affinity to $P$. nigroventris, new species, herein described. The fact that neither the lateral margins of the pronotum nor the bases of the elytra are impunctate distinguishes this species from $P$. marginella Stål. The particular features that separate
this new species from any close relatives are its more broadly oval form, due for the most part to the widened bases of the hemelytra, the very wide embolium, the very short tylus, the stout first rostral segment, the coarser and more scattered puncturation, the unique form of the parameres in the male, and the impressed basal plates of the female genital valves.

## Neodine tatei, new species

Oval, moderately convex above, very weakly so below; glossy dark olivaceous brown, with a bronze tone; densely and uniformly punctured, with relatively little calloused surface evident.

Head not at all exerted, with about the same proportions as in Neodine macraspis (Perty); sordid yellow, the numerous punctures bordered with ferruginous rings which become confluent and produce a reticulate reddish brown pattern on the disc; margins reddish brown and weakly reflexed just before the anteocular sinuses; ocelli carmine, more than twice as far apart as each ocellus is from its eye; eyes mahogany red; both antennae missing except for the basal segments which are mottled fuscous and sordid yellow and just reach the apex of the head.

Pronotum two and a half times as wide ( 300 by 120) across the humeri as long medianly (in macraspis the pronotum is proportionately longer, i.e., 300 by 140); a pronounced narrow transverse sulcus just behind the middle half of the anterior margin; anterolateral margins straight, distinctly carinate but not reflexed, the edges of the carinae fuscous and the carinae evanescent at the humeri; each anterior apical angle terminating in a small, retrorse subconical, ivory denticle; disc sordid yellow, rather evenly and densely punctured, the punctures with ferruginous or fuscous or piceous borders which become confluent, especially posteriorly and humerally where the disc is very dark; anterior margin very weakly excavated, the head and eyes essentially contiguous there.

Scutellum reaching the abdominal apex, the margins sinuate in the middle, at which point the frenum ends; posterior half somewhat wider than in macraspis and the apex more broadly triangular; disc sordid yellow, densely and evenly punctured; the punctures with ferruginous borders that become confluent, producing an irregular pattern of reticulation.

Hemelytra quite densely punctured, the punctures diminishing in size apically; the ferruginous to fuscous borders of the punctures confluent throughout, so that the hemelytra are dark colored, with a vague, darker, oblong discal spot evident; the costal margin and visible veins
contrastingly ivory colored. Connexivum moderately exposed, the margin narrowly ochraceous, the confluent punctures on each segment reddish.

Venter dark fulvous to reddish fuscous; under surface of head and the thoracic pleura finely and densely punctured, a conspicuous calloused ochraceous spot near the external apical angle of the metapleuron. Femora marmorate fuscous and fulvous, pale basally; tibiae fulvous, their upper (sulcate) surfaces piceous or very dark fuscous, especially on the first two pairs; tarsi reddish fulvous. Abdomen reddish brown laterally, sordid fulvous centrally, the longitudinal rostral furrow very pronounced and reaching through the sixth sternite; disc very finely and obscurely punctured laterally, more coarsely ferruginous punctured mesally.

Basal plates of the female genital valves flat, very large, longer than wide ( 60 by 50 ), overlying the other plates of the genitalia, thus obscuring them, and reaching the apex of the seventh sternite. In macraspis the basal plates are shorter than wide ( 30 by 40 ), and the other plates are visible.

Described from one specimen.
Holotype: Female: 13.5 mm . long; 7.75 mm . wide across the humeri; 9.0 mm . wide across the greatest abdominal width; Mt. Duida, Venezuela, November 7, 1928. George H. H. Tate, collector. Deposited in the American Museum of Natural History.

I take pleasure in naming this new species for the late Dr. George H. H. Tate, collector of the above specimen and formerly Curator, Department of Mammals, at the American Museum of Natural History.

It is patent from the above description that while this new species is allied to Neodine macraspis (Perty) and N. variegatus (Dallas), there are sufficient differences in color and color pattern to warrant its separation. In addition to color differences the unique character of the basal plates of the female genitalia immediately sets it off by itself, as does the fine and dense puncturation.

TRIBE HALYINI STÅL, 1872
Miopygium grossa, new species
Closely related to Miopygium cyclopeltoides Breddin, similarly fuscous to piceous but with the anteocular process reduced to a stout triangular tooth much as in the genus Alitocoris Sailer and with a longer scutellum. The body proportionately longer than in cyclopeltoides, larger and somewhat more robust, with the following distinctive characteristics.

Head rather shallowly set in the pronotum, the posterior margins of the eyes almost contiguous with that part; as wide between the eyes as long medianly ( 70 by 70); juga obliquely rugose, apically acute, longer than the tylus by at least the width of one jugum there, leaving a long, narrow, triangular sinus apically; margin before the eyes moderately sinuate, basally provided with a stout, short, triangular process, which partially obscures the base of the antennal tubercle from above; margins moderately reflexed, the disc between appearing weakly excavated; vertex tending to be flattened, coarsely punctured; eyes globose and protruding; ocelli moderately large and coincident with a line drawn through the anterior pronotal angles, twice as far apart as each ocellus is from its adjacent eye. Antennae four-segmented, a little more than half of the body length; basal two segments piceous, incrassate, particularly in the male, terminal two much thinner and fuscous to reddish brown; basal segment exceeding the apex of the head by about one-third of its length; segmental ratios: $32 / 95 / 56 / 85$, i.e., segment II about three times as long as segment I.

Pronotum two and a third times as wide across the humeri as long medianly ( 265 by 115), anterolateral margins thin, mildly reflexed, and sometimes weakly sinuate; width across anterior margin only slightly exceeding the width through the eyes; disc coarsely rugose across the posterior half, less so anteriorly; punctures small but deep, scattered between the rugae and tending to congest anteriorly; anterolateral margin terminating posteriorly just before the humerus in a small blunt tooth; anterior apical lobe transversely produced, equilateral triangular, and no more prominent than the anteocular process.

Scutellum not much longer than wide across the base ( 170 by 160 ), the lateral margin moderately sinuate, the frenum ending just behind the middle; apex evenly rounded and moderately wide; disc transversely rugose, the punctures irregularly scattered. Hemelytra evenly punctured, a minute, sordid yellow discal spot present on the corium; apical margin of the corium straight, the external apical angle rectilinear, and not reaching beyond the base of the fifth abdominal segment. Membrane rich brown, not quite attaining the apex of the body; veins strongly raised, with some small amount of reticulation basally. Connexivum widely exposed beyond the fourth abdominal segment, concolorous reddish fuscous to piceous; apical abdominal angles very weakly produced.

Venter for the most part piceous or very dark fuscous, a few isolated lighter areas evident on the propleuron. Rostrum and legs concolorous fulvous, the femora sometimes very obsolescently stippled with light
brown, usually immaculate, however; acetabula mottled fulvous and fuscous. Rostrum not extending beyond the metacoxae, the ventral abdominal rostral furrow obsolete. Abdominal disc concolorous piceous and only vaguely punctured laterally.

Submarginal apical surface of the male genital segment deeply impressed in the form of a broad U , with a deep median notch on the apical margin; lateral apical lobes of the segment produced vertically, the tips acutely angled, the inner margins of the lobes inflected. Basal plates of the female genital valves suboval in outline, the apical margins evenly rounded and meeting medianly in a V-shaped sinus; disc of each basal plate distinctly tumid near its center.

Described from 14 specimens, two males and 12 females.
Holótype: Male: 12.0 mm . long; 7.0 mm . wide across the humeri; Corupa (Hansa Humboldt), Santa Catharina, Brazil; December, 1945. A. Maller, collector. Deposited in the American Museum of Natural History.

Allotype: Female: $13: 0 \mathrm{~mm}$. long; 7.5 mm . wide across the humeri; Corupa (Hansa Humboldt), Santa Catharina, Brazil; November, 1948. A. Maller, collector. Deposited in the American Museum of Natural History.

Paratypes: Brazil, Santa Catharina, Corupa (Hansa Humboldt); December, 1944 (three females); January, 1945 (three females); December, 1945 (one female); January, 1946 (one female); December, 1948 (one male, three females). A. Maller, collector. All deposited in the American Museum of Natural History.

## VAURIANA, NEW GENUS

Figure 1
Intermediate between Ochlerus Spinola and Lincus Stål, having some of the characteristics of each genus. Broadly oval, noticeably convex above and strongly so below.

Head exerted and with the anterior two-thirds of the pronotum moderately declivous. Eyes subpedunculate, a pronounced hiatus between them and the anterior margin of the thorax; lateral margins weakly sinuate just before the eyes and then subparallel, with no appreciable degree of convergence to a narrowly rounded apex; juga longer than the tylus, a small apical sinus present; apex of head broader than in either Lincus or Ochlerus; disc somewhat excavated just before the eyes, the margins there slightly reflexed; no anteocular lobe or denticle present; antennae five-segmented, about half of the length of the body, with segment II much longer than either I or III;
ocelli moderately large, widely spaced, and placed in front of a line drawn across the anterior pronotal angles.

Anterolateral pronotal margins sinuate at the middle, barely reflexed, and terminating posteriorly in a small, obscure, blunt angle just before each humerus; middle third of anterior pronotal margin, just behind the head, elevated and bearing a median, broad, shallow notch; lateral thirds of the anterior margin conspicuously truncate behind the eyes and each then continued laterally into a small, stout, subconical denticle.

Scutellum longer than wide at the base, the frenum ending about two-thirds of the distance from the base; apex moderately rounded, broader than in Lincus but less so than in Ochlerus; the lateral margins near the apex very weakly reflexed.

Rostrum arising from a point opposite the antennal tubercles. Mesosternum with a low median carina which broadens slightly posteriorly. Metasternum with a finer low, but distinct, median carina. Ventral surfaces of the anterior and middle femora provided with a


Fig. 1. Vauriana, new genus. Outline of body form.
number of small, acute, conical denticles which increase in size and proximity subapically; a few minute, very obsolescent denticles apically on the posterior femora; upper surface of the terminal segment of the posterior tarsi depressed.

Posterior face of the large male genital segment provided with a prominent U-shaped emargination, the border of which is somewhat thickened and interrupted at the base; apical third of the proctiger broadly reflexed, its margin truncate, and the submarginal surface excavated.

Genotype: Vauriana bimaculata, new species.
The dorsal aspect of the head, with its rectilinear apical sinus, suggests relationship to Lincus, as does the wide space between the posterior margins of the eyes and the anterior margin of the pronotum. But the absence of lobular, hook-like processes there immediately distinguishes the two forms. The presence of a thin, median, metasternal carina places this genus closer to Ochlerus, as such a carina is lacking in Lincus; the laterally projecting denticles at the anterior angles of the pronotum are more suggestive of Ochlerus than any other relatives. The unique characteristics found in Vauriana are the denticulate under surfaces of the femora, the elevated and notched middle third of the anterior pronotal margin, and the long second antennal segment.

I take pleasure in dedicating this genus to my friends and colleagues, Dr. and Mrs. Charles Vaurie of the American Museum of Natural History, who, over a period of years, have collected many pentatomids for my study.

## Vauriana bimaculata, new species

Oval, dark fuscous above and piceous below, except the rostrum, tarsi, and terminal segments of the antennae which are fulvous, and a large oblong discal spot on each hemelytron which is ochraceous.

Head half again as long medianly as wide between the eyes ( 100 by 66 ), deeply, coarsely, and irregularly punctured on the vertex and between the eyes, transversely rugose before the eyes except the apical portions of the juga which are obsolescently punctured. Eyes subglobose, protruding but not exceeding the width of the anterior pronotal margin; ocelli three times as far apart as each ocellus is from its eye. Antennal segmental ratios: 40/65/45/70/65, i.e. segment II more than one and a half times as long as I, much longer than segment III and subequal to segment V; segment IV the longest; segments I, II, III, and basal half of segment IV fuscous; apical half of IV and all of V fulvous.

Pronotum about two and a third times as wide across the humeri as
long medianly ( 310 by 130); anterior angles produced laterally into short, stout, conical denticles each about as long as wide at the base; posterior portion of the disc coarsely, strongly, and irregularly rugose (giving the superficial appearance of a cerebral cortex), with a scattering of deep punctures between the rugae; cicatrices not too well defined, but their centers distinctly elevated, almost tumid; deep punctures scattered over the anterior third of the disc, a few congested ones just behind the notched and elevated middle third of the anterior margin; anterolateral margins sinuate at the middle, the edges slightly thick-carinate and very slightly reflexed; humeri concolorous with the adjacent areas.

Scutellum slightly longer than wide (230 by 200), surface undulating, the disc impressed centrally, mildly elevated anteriorly and posteriorly, coarsely and irregularly rugose anteriorly, less so apically; punctures widely spaced; frenum ends two-thirds of the distance from the base, the lateral margins from there subparallel and slightly reflexed apically; apex moderately rounded and reaching the middle of the fifth abdominal tergite. Hemelytra very evenly and closely punctured, not rugose; embolium becoming castaneous apically; a large, oblong, ochraceous discal spot present on each elytron; apical margin of coriaceous portion weakly sinuate, the external apical angle blunt and attaining the middle of the fifth tergite or slightly beyond, i.e., hardly longer than the scutellum; membrane rich light castaneous, with eight to 10 subparallel raised veins. Connexivum narrowly exposed, concolorous piceous, the apical abdominal angles bluntly rectilinear and weakly produced.

Bucculae well elevated, the margins somewhat sinuate, apically acutely dentate and posteriorly ending in line with the base of the eyes. Rostrum orange fulvous, segment I attaining the procoxae, segments II, III, and IV essentially subequal, apex of segment II not exceeding the mesocoxae, and the apex of IV reaching at least the middle of the fourth abdominal sternite. Thoracic pleura sparingly but deeply punctured, auricle of metasternal orifice elevated, short and ending abruptly; evaporatorium very small, confined to region of orifice and auricle. Femora and tibiae fuscous or darker, tarsi light castaneous to fulvous; some denticles on the under surfaces of the anterior femora aggregated into a subapical cluster, becoming almost spinose there; tibiae conspicuously broad sulcate above and provided with dense, numerous, golden setae, especially apically. Abdominal venter shallowly, evenly and widely punctured laterally, impunctate centrally, the median rostral furrow obsolescent or very weakly evident.

Lateral lobes of the male genital segment produced obliquely upward, their apical angles acute and entire; heads of the parameres (claspers), as seen from the ectal aspect, subfoliate, squarish in outline, with their dorsal margins slightly deflected laterally.

Described from one specimen.
Holotype: Male: 14.5 mm . long; 7.75 mm . wide across the humeri; Kaiateur, British Guiana; August 13, 1911. Deposited in the American Museum of Natural History.

## MINILINCUS, NEW GENUS

Figure 2
Closely allied to Lincus Stål, but much smaller (less than 10.0 mm . long) and without the benefit of the curved, hook-like lobes between the eyes and the anterior pronotal margins. Body narrowly oval; head and anterior half of the pronotum mildly declivous.

Head moderately exerted, so that almost as much of the head lies behind a line drawn across the anterior margins of the eyes as lies in front of that line; a small hiatus between the eyes and the anterior pronotal margin; anterior pronotal margin less than twice the width of the base of the head; head longer than diameter between the eyes; anterolateral margins somewhat sinuate and reflexed; disc shallowly excavated on each side of the tylus; juga longer than the tylus, a small apical sinus present; eyes globular and protruding; ocelli large and widely separated, lying on the slopes of the very convex vertex, behind


Fig. 2. Minilincus, new genus. Outline of body form.
a line drawn through the anterior pronotal angles; antennae fivesegmented, about half of the length of the body; segment I not exceeding the apex of the head; segments I, II, and III subequal.

Pronotum about two and a half times as wide across the humeri as long medianly; anterolateral margins moderately sinuate at the middle, somewhat reflexed and terminating posteriorly in a small obscure tooth just before the humeri; anterior margin behind the head forming a wide, shallow V , the lateral angles of which continue obliquely forward as small, acute, triangular lobes that do not exceed the lateral limits of the eyes.

Scutellum one-third longer than wide at the base, the frenum ending about two-thirds of the distance from the base, the lateral margins from there gradually convergent to a narrowly rounded apex which attains the middle of the fourth abdominal tergite, its margins not reflexed apically. Connexivum narrowly exposed, the apical segmental angles not at all produced.

Bucculae raised, their margins straight, parallel, angulate anteriorly, and ending abruptly posteriorly in line with the base of the eyes. Rostrum arising from a line drawn across the bases of the antennal tubercles, the apex of the fourth segment attaining the middle of the fifth abdominal sternite. Mesosternum finely but distinctly carinate longitudinally. Metasternum almost equilaterally hexagonal, neither elevated nor depressed and not longitudinally carinate or sulcate. Median portion of second abdominal sternite verv weaklv tumid; rostral furrow on abdominal disc ill-defined. Terminal segments of tarsi subequal to the basal two combined, those on the hind tarsi distinctly concave above.

Genotype: Minilincus parvulus, new genus, new species.
That this genus is allied to Lincus Stål is evident from the general build of the head, pronotum, scutellum, mesosternum, and metasternum. It differs, however, by its much smaller size, lighter color, and absence of hook-like lobes at the anterior lateral angles of the pronotum.

## Minilincus parvulus, new species

Narrowly ovate, almost oblong; over-all color medium brown or light castaneous. Moderately convex above, strongly so below.

Head one and one-half times as long medianly as wide between the eyes ( 60 by 40 ); vertex very convex, densely and finely punctured; disc excavated before the eyes and finely obliquely rugose there; apical portions of the juga impunctate; lateral margins somewhat reflexed; juga
longer than the tylus by the width of one jugum, a small rectilinear apical sinus present; eyes red, globular, and protruding slightly beyond the apical angles of the pronotum; ocelli pale red, five times as far apart as each ocellus is from its adjacent eye; antennae medium brown, the joints and basal third of terminal segment pale; antennal ratios: $22 / 22 / 25 / 38 / 45$, i.e., segments I, II, and III essentially subequal; the segments finely setose.

Pronotum about two and one-half times as wide across the humeri as long medianly ( 165 by 65); punctures quite uniform in size and even in distribution; transverse rugosity not very pronounced; a fine ochraceous median linea, becoming evanescent posteriorly, present; humeri slightly tumid and paler in color than adjacent area; a narrow, shallow, transverse sulcus just inside the anterior margin.

Scutellum one-third longer than wide at the base ( 120 by 90 ), the surface moderately punctured and rather uniformly, but very mildly, convex; margins of the apical third gradually convergent to a narrowly rounded, but not acute, apex; disc weakly transversely rugose; a small, but conspicuous, calloused, ochraceous, median spot present at the basal margin. Hemelytra moderately and quite evenly punctured, a small, obscure, discal ochraceous spot on each elytron; apical margin of the corium moderately sinuate, the exterior apical angle acute and reaching the middle of the fifth tergite; membrane uniformly dull smoky brown, the veins prominently raised. Connexivum narrowly exposed, castaneous, with a narrow ochraceous transverse band in the middle of each segment; plates moderately punctured, segmental angles rectilinear and not at all produced.

Bucculae as described for the genus, with no acute apical tooth or denticle present. Rostrum long, light brown, only the extreme apex fuscous; segment I not quite reaching the procoxae; segment II not exceeding the mesocoxae; the apex of segment IV attaining at least the middle of the fifth abdominal sternite. Auricle of the metasternal orifice very short, elevated, and ending abruptly, the free end hardly larger than the diameter of the orifice; evaporatorium small and confined to the ental half of the metapleuron. Abdominal disc impunctate centrally, the longitudinal rostral furrow barely evident; very vaguely and almost invisibly punctured laterally. Thoracic pleura rather densely but uniformly punctured. Coxae, trochanters, and femora light brown, with a faint infuscated subapical annulus on the last; tibiae and tarsi darker.

Posterior face of the male genital segment emarginate in the form of an equilateral V , the margins of which are slightly thickened and
raised. In Lincus the V-shaped emargination is much longer vertically than wide, and the margins are weakly reflexed. Basal plates of the female genital valves impunctate, about as long as wide and the apical margins evenly convexly arcuate.

Described from five specimens.
Holotype: Male: 8.0 mm . long; 4.0 mm . wide across the humeri; Tingo Maria, Huanaco, Peru; October 11, 1956. J. C. Pallister, collector. Deposited in the American Museum of Natural History.

Allotype: Female: 9.0 mm . long; 4.75 mm . wide across the humeri; Tingo Maria, Huanaco, Peru; November, 1946. W. Weyrauch, collector. Deposited in the American Museum of Natural History.

Paratypes: Three females: Peru, Monson Valley, Tingo Maria; September 18, 1954. E. S. Ross, collector. Two deposited in the California Academy of Sciences; one retained in the American Museum of Natural History.

This species differs from any species of Lincus or allied genus by its light color, its antennal segmental ratios, small size, and relatively long rostrum. Its closest relative may be Lincus dentiger Breddin, but that author's description is so poor that exact identification of his species is indeed difficult.

## BRACHELYTRON, NEW GENUS

Figure 3
Obovate; greatest body diameter across the basal margin of the fourth abdominal segment; moderately convex above and below; uniformly arcuate in the median line from anterior to posterior; almost nymphal in appearance.

Head two-thirds as wide between the eyes as long to the apex, set in a deep concavity formed by the anterior margin of the pronotum and partially surrounded by foliate extensions of that part; juga longer than the tylus but not contiguous apically, leaving a narrow rectilinear sinus there; margins before the eyes strongly sinuate and weakly reflexed; a short, stout, triangular process or lobe before each eye; antennal tubercles moderate in size, apically acute, and partially obscured from above by the anteocular processes; ocelli very small and widely separated, more than five times as far apart as each ocellus is from its adjacent eye; eyes ovoidal, moderate in size and not at all pedunculate, rather sessile, not protruding. Antennae relatively short, probably not reaching much beyond the posterior margin of the pronotum; segment I thickened and just reaching the apex of the head and
subequal to segment II; terminal segments slender and uniform in diameter; segment V missing.

Pronotum two and a half times as wide through the humeri as long medianly; anterolateral margins thin (carinate) and strongly sinuate, continued anteriorly, where in conjunction with the lateral expansions of the anterior pronotal margin prominent triangular foliate lobes are formed, the acute apical angles of which extend forward around the basal portion of the head and reach at least to a line drawn across the apices of the anteocular processes.


Fig. 3. Brachelytron, new genus. Outline of body form.
Scutellum short, wider at the base than long medianly, the very obtusely rounded apex barely reaching the middle of the third abdominal tergite; the frenum ends more than three-fifths of the distance from the base; the lateral margins obsolescently sinuate.

Only the short basal coriaceous portions of the hemelytra present, the membranes lacking altogether; the apical margins perfectly truncate transversely, reaching only the basal margin of the third abdominal tergite, i.e., noticeably shorter than the scutellum. Connexivum and abdominal tergum totally exposed beyond the third abdominal segment, uniformly and finely punctured; the margin of the body gradually rounded posteriorly.

Both mesosternum and metasternum narrowly but distinctly carinate longitudinally. Rostrum reaching the middle of the fourth abdominal sternite; median abdominal rostral furrow obsolescent. Tibiae shal-
lowly sulcate above. Terminal segments of the tarsi subequal to the basal two combined, those of the posterior tarsi depressed above.
Genotype: Brachelytron angelicus, new species.
This genus falls into the Macropygium-Melanodermus complex of New World Halyini, probably midway between the two extremes. Certain affinities to Alitocoris Sailer are shown by the presence of the small but stout, triangular, anteocular lobe or process, the general form of other parts of the head, the moderately long rostrum, and the overall shape of the body. It differs from all other known Halyini by virtue of the membrane-less elytra, the short, broad scutellum, the foliate expansions of the anterior lateral portions of the pronotum which surround the base of the head, and the very small, almost invisible, ocelli which are placed far apart.

## Brachelytron angelicus, new species

Obovate, over-all color dark reddish fuscous to piceous above and below; legs, in part, lighter.

Head as specified above; juga exceeding the tylus by the width of one jugum there; apical sinus very narrow; disc shallowly excavated laterally and weakly tumid just inside each eye; punctures coarse on vertex, finer anteriorly; apex narrowly rounded but not acutely angled; eyes moderate in size and not noticeably protruding. Antennal ratios: $23 / 22 / 33 / 30 /$-, i.e., segments I and II subequal in length, segments III and IV each longer than I and II, segment V missing. Segments I, II, and III fuscous, segment IV lighter brown.

Pronotum reddish fuscous, strongly and coarsely transverse rugose on the posterior half of disc, with evenly spaced deep punctures between the rugae; deeply and evenly but sparingly punctured on the anterior half; all punctures of moderate size; median anterior margin, just behind the vertex of the head, slightly thickened and raised; each cicatrix provided with a small, but prominent, erect, punctured tubercle in its center, surrounded by an impunctate area; anterolateral margins sinuate, continued forward in triangular foliate extensions as described for the genus, and terminating posteriorly, just before the humeri, in inconspicuous angular tooth; humeri obtuse; anterior lateral angles of the foliate expansion of the pronotum slightly elevated so that their apices are above the level of the bases of the head and eyes.
Scutellum reddish fuscous, coarsely rugose across the basal half, less so posteriorly; a small, but prominent, median ochraceous levigate
spot on the basal margin; lateral margins hardly sinuate; apex very broadly rounded and just about reaching the median trisinuate margin of the third abdominal tergite. Coriaceous portion of hemelytra reddish fuscous, broadly triangular; apical margin transversely truncate, the external apical angle obtusely rounded; disc moderately punctured, with no differential markings.

Connexivum and visible abdominal tergum concolorous piceous, finely and evenly punctured; apical abdominal angles rectilinear and not at all produced; seventh abdominal tergite transversely elliptical, its posterior margin evenly rounded.

Bucculae moderate in height, edentate apically, the margins straight, slightly divergent posteriorly and ending abruptly near the base of the head. Rostrum fulvous, segment I not quite reaching the procoxae, segment II attaining the mesocoxae, the apex of segment IV reaching the middle of the fourth abdominal sternite, i.e., segments III and IV longer than segment II; only the extreme apical portion fuscous.

Thoracic pleura dark fuscous to piceous, coarsely, deeply, and more or less uniformly punctured; auricle of the metasternal canal digitiform, quite short, and well raised off the plate, its apex ending abruptly and not produced beyond the inner third of the metapleuron; its anterior margin perfectly transverse; evaporatorium quite small, its surface irregularly but weakly rugose, apparently confined to the metapleuron and not extended beyond the middle of the disc.

Abdominal sternites moderately, evenly, but shallowly punctured laterally, vaguely so more centrally, and impunctate medianly, the median longitudinal rostral furrow barely evident.

Basal plates of the female genital valves about as long as wide, the apical margins evenly rounded, the inner apical angles weakly tumid and slightly divergent.

Described from one specimen.
Holotype: Female: 9.0 mm . long; 5.0 mm . wide across the humeri; 6.0 mm . wide across the greatest abdominal width; Corupa (Hansa Humboldt), Santa Catharina, Brazil; November, 1944. A. Maller, collector. Deposited in the American Museum of Natural History.

## ZIMMERIA, NEW GENUS

Figure 4
Kormilev (1956, Acta Sci., Inst. Cien. Nat., Argentina, no. 4, pp. 3-6) assigned to the genus Serdia Stål three new species, namely, vivanai, ståli, and bergi. While these are congeneric, comparison of them with known species of Serdia indicates that they do not belong
to that genus. Detailed study shows that they conform to the characters given by Stål in the first half of couplet $10(23)$ of his key (1867, Öfvers. K. Vetensk. Akad. Forhandl., vol. 24, p. 523), which thus places them with other genera tentatively accepted as belonging to the tribe Halyini. A new generic name is here erected to receive these species.

Oblong, slightly more than twice as long as the greatest width; glossy, margins of the body essentially parallel; dorsally depressed and


Fig. 4. Zimmeria, new genus. Outline of body form.
moderately convex ventrally; head and anterior two-thirds of the pronotum very mildly declivous.

Head longer than width between the eyes, not at all exerted but set in a shallow emargination of the anterior pronotal border, which is twice as wide as the width of the head; juga apically acute, longer than the tylus but not connivent there, leaving a prominent apical sinus; anteocular margins of the head broadly reflexed; antennae fivesegmented, at least half of the length of the body, segment I exceeding the apex of the head; antennal tubercles exceptionally large and totally visible from above; ocelli large and bulging, two or three times as far apart as each ocellus is from its adjacent eye; eyes large, protruding but not exceeding the anterior width of the pronotum.

Pronotum at least twice as wide as long medianly; humeri obtusely rounded and not at all produced. Scutellum about one and one-half times as long as wide at the base, the frenum ending well past the middle; apex narrowly rounded, reaching the middle of the fourth abdominal tergite, its lateral margins not reflexed there. Elytral margins essentially straight and parallel to one another; membrane barely extending beyond the abdominal apex. Connexivum narrowly exposed, the apical abdominal angles rectilinear and very slightly produced.

Rostrum arising from a point in a line just in front of the antennal tubercles, the basal segment longer than bucculae and reaching at least to the base of the head; rostral apex not extending onto the abdomen. Prosternum shallowly and triangularly impressed, almost sulcate. Mesosternum with a low but distinct longitudinal carina which widens slightly posteriorly. Metasternum somewhat elevated, subconvex, elongate hexagonal and emarginate on its narrow posterior margin to receive the median, forward projecting, tuberculiform enlargement of the second abdominal sternite. Abdominal disc devoid of a rostral furrow, essentially impunctuate or exceedingly obscurely punctured laterally. Canal of metasternal orifice long, tapering, and extending laterally beyond the middle of its supporting plate; evaporatorium large and extended in part onto the mesopleuron. Thoracic pleura very sparingly but deeply punctured. Tibiae subterete and narrowly and shallowly sulcate on the upper surfaces; basal tarsal segment subequal to or longer than the distal two combined; terminal segment of posterior tarsus slightly depressed above. Male genital segment exceptionally large and robust.

Genotype: Zimmeria ståli (Kormilev).
The characteristics set forth above are those usually associated with
other genera in the tribe Halyini, in which group this new genus is placed. There is considerable superficial resemblance in form, color, markings, and nitidous appearance between Zimmeria and Neoadoxoplatys Kormilev ${ }^{1}$ and to a lesser degree to Adoxoplatys Breddin. ${ }^{1}$ Detailed study of these different genera, however, indicates that Zimmeria is not very closely allied to either of the other two. Rather it precedes phylogenetically such a remarkable genus as Caracia Stål and remotely follows genera such as Minilincus and Vauriana, new genera herein described. The impunctate ventral abdominal disc, the short rostrum, the carinate mesosternum, elevated metasternum, and the large male genital segment are distinctive characteristics of Zimmeria.

I have the honor of naming this new genus for the late Dr. John Todd Zimmer, author of a number of important papers on pentatomids and more recently Curator and Chairman of the Department of Birds in the American Museum of Natural History.

At this time I would like to elaborate on the brief descriptions given by Kormilev for his species ståli and bergi; the species vianai is sufficiently well described so that it needs no further elaboration.

## Zimmeria ståli (Kormilev)

Serdia stali Kormilev, Acta Sci., Inst. Cien. Nat., Argentina, no. 4, p. 4.
Over-all color dark castaneous, sometimes with a lighter suffusion on the pronotum, apex of scutellum, and ventral abdominal disc. Punctures on pronotum and scutellum widely spaced and irregularly distributed in contrast with the more densely and regularly placed ones on the hemelytra. Size large ( 19.0 mm . long).

Head almost twice as long as wide between the eyes (110 by 60); disc deeply excavated anteriorly owing to the broadly and strongly reflexed lateral margins there, the latter sinuate before the eyes to the acute apex; juga apically acute, longer than the tylus by at least the width of one jugum there, the inner margins subparallel and a pronounced elongate apical sinus present; disc transversely rugose to the base, the vertex not conspicuously convex; eyes large, reddish fuscous, and laterally just reaching the anterior angles of the pronotum; disc of head somewhat obliquely thickened and raised along the inner margin of each eye; no distinct anteocular process or lobe present, this area merely thickened; ocelli bright red, very large, only twice as far apart as each ocellus is from its eye and coincident with a line drawn

[^1]across the apical anterior angles of the pronotum. Antennae quite long, almost three-fifths of the length of the body; basal four segments piceous, basal half of fifth segment dull ivory yellow, the apical half light fuscous; segment I strongly incrassate in both sexes and exceeding the apex of the head by about half of its length; remaining segments much thinner; basal three segments coarsely setose, terminal two segments finely and densely setose; segmental ratios $60 / 80 / 120 /-$ $120 / 130$, i.e., segment II longer than I but only two-thirds of the length of III.

Pronotum two and one-third times as wide as long medianly (320 by 140); anterolateral margins entirely straight, thickish, particularly anteriorly, and obtusely carinate only on the posterior half; anterior margin shallowly concave centrally, the lateral portions just behind the eyes truncate and ending on each side in a small, acute, laterally projecting denticle, the truncate surface sordid yellow; median portion behind the head thickish, slightly elevated, and followed posteriorly by a narrow arcuate transverse sulcus provided with numerous congested punctures; disc relatively smooth, no rugae apparent; punctures piceous, conspicuous but widely spaced, diminishing in size laterally to the almost impunctate anterolateral margins; humeri very slightly tumid, levigate, and ochraceous in color; cicatrices large, impunctate save for a single irregular transverse row of punctures; posterolateral margins grading imperceptibly into the truncate posterior margin; no posterior angles evident.

Scutellum less than one and one-half times as long as wide at the base ( 290 by 200); the frenum ending almost three-fifths of the distance from the base, the lateral margins from there onward subparallel, the apex narrowly rounded; a prominent calloused ochraceous oblique spot adjacent to each basal angle; punctures on disc relatively widely spaced basally, smaller and denser apically, especially in the vicinity of the area where the frenum ends; apex sometimes lighter in color. Hemelytra evenly and densely punctured, especially on the corium where there is a conspicuous, but not large, subcalloused ochraceous discal spot. Membrane barely extending beyond the abdominal apex, uniformly medium brown, with 12 to 15 prominent, raised, subparallel veins. Connexivum narrowly exposed, fuscous, with a small paler marginal spot present in the middle of each segment; apical angles rectilinear and slightly produced, especially on the last three segments.

Bucculae moderately elevated anteriorly, edentate there, the margins straight, subparallel, gradually diminishing in height posteriorly, and
ending before the middle of the eyes. Rostrum fulvous, segment I reaching the prosternum but not attaining the procoxae; segments II and III subequal in length; segment IV three-quarters as long as segment III and reaching the apex of the metasternum but not extending onto the abdomen. Mesosternum impunctate and glossy on each side of the median carina; only a few punctures on the acetabula and near the anterior margins of the mesopleura; posterior portions of the mesopleura coarsely rugose, there becoming a constituent part of the evaporatorium. Metasternal disc moderately elevated, longer than wide, the posterior margin shallowly and obtusely notched. Osteolar canal tapering, with a partial spiral twist, reaching almost four-fifths across the supporting plate; evaporatorium large, occupying more than half of the metapleural plate, coarsely and irregularly rugose; femora light castaneous, darkening somewhat apically; tibiae lighter; the hind tibiae exceptionally long, almost half again as long as the femora.

Median portion of the second abdominal sternite stoutly and obtusely tuberculiform, produced forward to become contiguous with the notch in the apex of the metasternum. Abdominal disc dark castaneous, with a broad central area rich reddish brown; glossy, with only vague evidence of very fine, widely spaced punctures laterally.

Male genital segment very large and robust, the apical margin deeply and widely V-shaped, the lateral lobes produced obliquely upward and backward; heads of the parameres (claspers) small, narrowly strap-shaped, with a wider base. Basal plates of female genital valves slightly wider than long, their apical margins truncate, the internal apical angles obtuse, the external apical corners bluntly and evenly rounded.

## Zimmeria bergi (Kormilev)

Serdia bergi Kormilev, Acta Sci., Inst. Cien. Nat., Argentina, no. 4, p. 4.
Oblong, glossy, dark castaneous to fuscous; densely and coarsely punctured; venter reddish fuscous, legs paler, usually testaceous. Intermediate in size ( 15.0 mm . long).

Head at least one and a half times longer medianly than wide between the eyes ( 95 by 60), the margins before the eyes moderately sinuate and narrowly reflexed; no anteocular lobe or denticle present, merely a triangular thickening there; juga acute, longer than the tylus by the width of one jugum there, a pronounced rectilinear apical sinus present; anterior half of the tylus conspicuously declivous, and the apical third of the head appearing to be excavated; cranial surface finely but not densely punctured, transversely and coarsely rugose
across the vertex and basal half of tylus, laterally and anteriorly obliquely and finely rugose; eyes dark brown, large, vertically oval, and protruding but not pedunculate; ocelli large and three times as far apart as each ocellus is from its adjacent eye. Antennae about half of the length of the body or slightly less, dark castaneous, with the basal third of the terminal segment sordid yellow; segment I weakly incrassate in both sexes, barely exceeding the apex of the head; all segments sparingly and finely setose; segmental ratios: $25 / 40 / 60 / 65 / 90$, i.e., segment II two-thirds of the length of segment III.

Pronotum slightly more than twice as wide as long medianly (280 by 130), the surface strongly and coarsely transverse-rugose, the punctures dense; anterolateral margins essentially straight, narrowly but distinctly reflexed all the way to the humeri; humeri blunt, not produced, impunctate testaceous; an impressed curved row of congested piceous punctures just inside the central anterior margin behind the head; lateral anterior margins obliquely truncate behind the eyes and terminating in a small, acute, conical denticle that projects obliquely laterally slightly beyond the outer margin of the eye; surfaces of the truncated areas are pale; cicatrices well defined, large, impunctate save for a single transverse row of punctures in their centers; posterolateral pronotal margins grading imperceptibly into the truncate posterior margin; no posterior angles evident.

Scutellum one-third longer than wide at the base ( 230 by 170), lateral margins sinuate, the frenum ending five-eighths of the distance from the base; surface transversely, coarsely but low rugose, punctures large, shallow, and ill-defined; basal angles impunctate, piceous; an oblong, subcalloused ochraceous spot adjacent to each angle; lateral margins, behind the point where the frenum ends, subparallel, the apex narrowly rounded but not acute and reaching the middle of the fourth tergite. Hemelytra densely punctured, the punctures coarse and shallow, those on the clavus smaller and more widely spaced; a prominent, but small, irregular, ochraceous discal spot on each corium; apical margin distinctly sinuate, the exterior apical angle acute and reaching at least the middle of the fifth tergite; membrane rich light castaneous, with eight to 11 slightly darker, subparallel veins, some showing occasional bifurcation; the membrane reaches or slightly exceeds the apical margin of the body. Connexivum narrowly exposed anteriorly, more widely so posteriorly; finely and densely punctured, concolorous except for the extreme narrow margin and a central marginal spot on each plate which are fulvous; apical segmental angles pale, rectilinear, and weakly produced on segments IV, V, and VI.

Bucculae well raised, edentate anteriorly, and not decreasing appreciably in height posteriorly, their margins subparallel and ending more or less abruptly at a line through the bases of the eyes; area between the bucculae and the antennal tubercles distinctly tumid. Rostrum short, segment I only slightly exceeding the bucculae and not attaining the prosternum; segment II reaching the procoxae, segment III attaining the middle of the mesosternum and the apex of segment IV not exceeding the mesocoxae; all segments testaceous or light fulvous.

Prosternum shallowly excavated and V-shaped between the acetabula. Median carina on mesosternum low but stout, ending anteriorly in a rounded, blunt tip between the procoxae and narrowly dilating posteriorly, the dilated portion transversely rugose. Metasternum fulvous to reddish brown, narrowly hexagonal, slightly tumid or weakly elevated, the posterior margin shallow emarginate. Thoracic pleura fuscous to reddish fuscous for the most part; sparsely and irregularly but deeply punctured. The metasternal canal fulvous and tapering beyond the middle of the plate; evaporatorium exceptionally large, occupying almost three-quarters of the metapleuron and about half of the mesopleuron, the surface irregularly rugose. Legs fulvous, tibiae and distal portions of femora darkening somewhat; tibiae becoming densely golden setose on apical half.

Abdominal venter impunctate, rich castaneous to fuscous, paler centrally, semiglossy there and matte laterally; median portion of second abdominal segment tumid and produced forward, to become contiguous with the posterior margin of the metasternum; apical segmental angles minutely pale, sometimes ivory colored.

Male genital segment robust, the apical margin between the lateral lobes stoutly V-shaped, the borders thickened; apical margins of lateral lobes broadly rounded, no apical angle, as such, present. Basal plates of female valves subtriangular, slightly wider than long, longitudinally finely rugose, their apical margins truncate.


[^0]:    1 Research Associate, Department of Insects and Spiders, the American Museum of Natural History, and Professor Emeritus, the City College of New York.

[^1]:    ${ }^{1}$ Both Adoxoplatys Breddin and Neoadoxoplatys Kormilev, having attributes comparable to other halyine pentatomids, should rightfully be placed in the tribe Halyini.

