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**SYNOPTICAL KEYS TO THE GENERA OF
THE NORTH AMERICAN MIRIDAE**

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The following keys cover all but eight of the genera of the Miridae thus far recorded from America north of Mexico. These eight genera were omitted on account of the want of material for study or because their occurrence in this country is a matter of much uncertainty. Dr. Reuter's great work on the Capsidae of Europe (*Hemiptera Gymnocerata Europae*, 5 vols., 1878-1896) and his later studies in the North American fauna have formed the foundation for the present paper, although the keys given here are for the most part original. I have found it impossible to work out his subfamilies of 1910 in a satisfactory analytical form, and, while accepting them in my catalogue of our Hemiptera, I have ignored them in the preparation of these keys, using only his tribes, or divisions as he terms them. In addition to these tribes I have found it both practicable and useful to establish groups of a lower category in two of the larger tribes which have been denominated divisions with the termination *-aria*. All synonymy has been omitted here, but it will be given in the catalogue.

One fact comes out plainly in these studies: that certain characters that are useful for diagnosis in one group may fail in another. This arises from the well-known fact that a character once discarded in the evolution of a group is never revived. Thus we find that the hamus, or vestigial vein, found in the wing-cell

in most of the Phylaria, is apparently always absent in the Orthotylini where it seems to have been discarded, but in the Oncotylaria, which is intermediate between these groups, it may be either present or absent in the same genus, possibly in the same species or individual.

The characters of the arolia present a similar case. Their form seems to be constant for each tribe but in any, at least of the larger ones, it may be entirely absent in certain genera. I would not, however, consider the arolia a vestigial character as is the hamus in the wing-cell.

In these keys I have attempted to arrange the tribes and genera in what seems to me to be the correct descending order, but here there certainly is a large field for investigation and many changes will probably have to be made. The claspers, or genital hooks, of the male form excellent specific characters in many cases, but there are groups of species here and there in which these hooks exhibit scarcely any appreciable differences between what are undoubtedly good species.

The following are the eight genera omitted from the keys: *Neocapsus* Dist., *Pallacocoris* Reut., *Neoborops* Uhler, *Eccritotarsus* Stal, *Teleorhinus* Uhler, *Cyllocoris* Hahn, *Orthocephalus* Fieb., *Microsynamma* Fieb.

As a matter of convenience the following terms are explained here.

Arolia.—The pulvillae between the base of the tarsal claws, sometimes free, sometimes united with the claws beneath.

Bucculae.—A narrow plate lying either side of the base of the rostrum; rarely used in the Capsidae.

Callosities.—A more or less elevated area on either side of the anterior lobe of the pronotum, usually distinguished by an impressed bounding line, at least posteriorly.

Cheeks or *gena*.—The two sclerites below the eyes and between the clypeus and gula. Between them is frequently a narrow segment called the *lora*. The inner or upper cheeks may be nearly flat or at times considerably elevated or tumid.

Clavus.—The inner area of the elytra next to the scutellum and separated from the corium by the claval suture. It is usually long-triangular in form, with its apex near the base of the membrane.

Clypeus or *tylus*.—The median lobe of the head below the front and reaching to the base of the rostrum.

Collar or *collum*.—The narrow anterior margin of the pronotum. Generally separated from the disk of the pronotum by an impressed line which may or may not be continued over the side.

Corium.—The main portion of the elytra lying exterior to the clavus; its outer margin being formed by the costa.

Cuneus.—A triangular piece, joined by a suture to the apex of the corium.

Facial angle.—The angle between the line of the bucculae and that of the clypeus when viewed from the side.

Fracture.—The notch between the apex of the corium and the base of the cuneus on the costal margin of the elytra.

Front.—The front of the head between the eyes, below the vertex and above the clypeus.

Gula.—The throat, or lower surface of the base of the head lying beneath the rostrum.

Lorae.—The narrow segment lying between the upper and lower cheeks at the base of the rostrum.

Membrane.—The membranous apical portion of the elytra. It carries a looped nervure at base forming one large areole and usually a second smaller one next the apex of the cuneus.

Scutellum.—The basal lobe is usually convex and separated from the apical by a suture. This basal lobe is often more or less covered by the base of the pronotum and in using this character allowance must be made for the depression of the pronotum.

Tylus.—Same as clypeus.

Vertex.—The basal portion of the superior surface of the head between the eyes. It merges insensibly into the base of the front.

Vestiture.—The covering of hairs on the surface of the body. These hairs may be soft or stiff, or they may be flattened and scale-like, and are often deciduous and very easily rubbed off.

Xyphus (prosternal).—The triangular piece on the prosternum between the bases of the anterior coxae.

In the Phylaria three new genera have been established for which there are as yet no described species, and they are therefore invalid here, but they will soon be validated by the publication of species. These genera are: *Leptotylus*, *Oligotylus*, and *Strophopoda*. One hundred and twenty-five genera are treated of here which, with the eight omitted genera, make a total of one hundred and thirty-three genera recorded from America north of Mexico.

The following is a fairly close translation of Reuter's key to his subfamilies of 1910:

- 1 (16). Membrane biareolate, or with one areole distinctly dilated at apex, very rarely without an areole but with several irregular longitudinal veins more or less distinct. Elytra with a distinct cuneus which very rarely becomes confluent with the corium.
- 2 (3). Arolia large, free, approximate at base between the claws, toward their apex very distinctly divaricate and frequently dilated.

- 3 (2). Arolia differently formed or wanting.
- 4 (5). Membrane distinctly pilose. Claws destitute of arolia.
- 8. Bothynotinae**
- 5 (4). Membrane glabrous.
- 6 (7). Pronotum without a collar, but with its apical area gibbous-convex, anteriorly frequently more or less produced above the vertex; always roundedly produced posteriorly but not surpassing the sides, the lateral margins attaining the apical. Arolia short, united to the claws or wanting. First tarsal joint longer than the second.
- 6. Ambraciinae**
7. (6). Pronotum with or without apical collar; destitute of a gibbous posteriorly rounded apical area.
- 8 (9). Arolia wanting. First joint of hind tarsi long or very long, rarely not longer than the second. Tibiae frequently mutic and very distinctly more slender toward its apex. Wing-cell with the hamus wanting or very rudimentary.
- 7. Cylapinae**
- 9 (8). Arolia present, rarely wanting, in this case with the first joint of the tarsi short, or the wing-cell with a distinct hamus, or the body constricted at the middle. First joint of the tarsi very rarely long, in this case the cell of the wing with a hamus or the arolia present. Tibia very attenuated toward its apex.
- 10 (11). Apical joint of the tarsi more or less distinctly incrassate, rarely sublinear. Arolia laminate, rarely short, frequently large, always approximate to or connate with the claws. Tibiae always destitute of spines. Lorae confluent with the cheeks. Cell of the wings without a hamus.
- 5. Bryocorinae**
- 11 (10). Apical joint of the tarsi linear, rarely a little thicker toward its apex, in this case the arolia free and connivent at apex. Tibiae frequently distinctly spinose.
- 12 (13). Prothorax with an annular collar at apex, in brachypterous females sometimes obsolete above in the middle. Arolia none, or with the arolia varying in length and closely approximated to the claws with which they are connate, at least at base, frequently for their whole length. Lorae linear, well distinguished on either side.
- 4. Macrolophinae**
- 13 (12). Prothorax without an apical collar, sometimes with the apical margin slenderly depressed, in this case with the arolia free and connivent at apex.
- 14 (15). Arolia free, slender, parallel or connivent at apex, very rarely none, in this case the wing-cell destitute of a hamus, or the body constricted at the middle, or the last two joints of the antennae thicker than the others.
- 3. Heterotominae**
- 15 (14). Arolia connate with the claws, very rarely free, in this case closely approximated to them, sometimes expanded at apex with the claws minute, falciform; frequently narrowly laminate, rarely none, in this case the wing-cell furnished with a hamus.
- 2. Phylinae**

- 16 (1). Membrane with but one areole, the vein mostly parallel with the suture. Elytra destitute of an embolium and cuneus. Prothorax without an apical stricture. First tarsal joint long. Arolia none. 1. **Lygaeoscytinae**

Of these, the subfamily Lygaeoscytinae is Australian; the subfamily Bothynotinae is confined to the Old World; the subfamily Phylinae is equivalent in our fauna to my Phylini, Bryocorinae to my Bryocorini, and Cylapinae to my Cylapini. Reuter's subfamily Heterotominae is the same as my Orthotylini, but his typical division Heterotomaria was first founded as Litosomidae by Douglas and Scott in 1865; but their genus *Litosoma* being a straight synonym of *Orthotylus* Fieb., the tribe, or division of Reuter, must be called Orthotylini and the subfamily Orthotylinae. Reuter's Macrolophinae embrace my Dicyphini (*Macrolopharia* Kirk., 1906 is antedated by *Idolocoridae* Dougl. and Scott, 1865, the typical genus *Idolocoris* Dougl. and Scott, 1865, being a synonym of *Dicyphus* Stal, 1858), and my Hallodapini which is equivalent to *Cremnocephalaria* Reut. (first established as *Eroticoridae* Dougl. and Scott, 1865, the typical genus *Eroticoris* Dougl. and Scott being a synonym of *Hallodapus* Fieb., 1858). Lastly Reuter's Mirinae include my Myrini, Capsini and Horistini; the latter, termed *Restheniaria* by Reuter, was first distinguished as *Lopidae* by Douglas and Scott in 1865, their *Lopus* being equivalent to *Horistus* Fieb., 1861. It will be noticed that Reuter has entirely ignored the work of Douglas and Scott, who were the first to break up the great family Capsidae into smaller divisions. That their divisions were sometimes made too limited in scope and were termed families is no reason for ignoring them entirely. Reuter uses the termination *-ina* for his subfamilies, which I have changed to *-inae* to make them conform to modern usage.

KEY TO THE TRIBES

- Apical margin of pronotum without a collar, swollen or elevated in a hood above the base of the vertex **Clivinemini**
 Apical margin of pronotum not swollen or elevated in a hood above the base of the vertex 1
 1. Third tarsal joint thickened toward its apex; membrane in our genera uniareolate **Bryocorini**
 — Third tarsal joint linear, or nearly so 2

2. Pronotum with a distinct apical collar, or with a flattened anterior margin simulating a collar 3
 — Pronotum without a collar 9
3. Pronotal collar convex, separated from anterior disk by a distinct incised line 4
 — Pronotal collar flat, without an incised line behind it, or wanting; body elongated, often linear 8
4. Head viewed from above short, vertical, produced below the eye for nearly twice the length of the eye; antennae long and slender, much longer than the entire body, inserted the length of the clypeus above its base; basal joint of the tarsi as long as the following two together; arolia wanting; vertex deeply sulcate; pronotal collar very slender **Cylapini**
- Head not greatly produced below the eye; antennae rarely longer than the entire body, inserted about on the line of the base of the clypeus; basal joint of the tarsi shorter than the following two taken together 5
5. Rostrum long, passing the middle of the venter; head produced, horizontal or nearly so; tibiae smooth, or with minute pubescence only; tarsi slender, basal point but little shorter than the following two together; arolia wanting **Fulvini**
- Rostrum shorter, scarcely surpassing the hind coxae; tibiae armed with bristles or clothed with longer hair, rarely smooth 6
6. Pronotal collar broad, convex, about as broad as the callosities; tibiae thickly clothed with soft hairs but without rows of stouter bristles; body opaque, black, marked with red or fulvous **Horistini**
- Pronotal collar narrow, convex, often linear, rarely broad; then flat with the body elongated, tibiae smooth and pronotum broadest before the middle 7
7. Body elongated, often linear; base of scutellum usually exposed; tibiae smooth or nearly so; arolia minute and united with base of the claws, or as long as the claws and lying close to them **Dicyphini**
- Body rarely elongated, with the base of scutellum exposed and tibiae smooth or nearly so, arolia in this case free and divergent at apex **Capsini**
8. Tarsi long, first joint longer than the following two together; pronotal collar a mere flattening of the anterior margin, or sometimes wanting; vertex often sulcate; arolia large, free, often clavate **Mirini**
- Tarsi shorter, first joint not longer than the third, usually shorter, pronotal collar often wanting; arolia united with the claws or wanting **Hallodapini**
9. Arolia free, parallel, or converging toward their tips; wing-cell without a hamus **Orthotylini**
- Arolia wanting, or parallel with and usually united to the claws at base, wing-cell normally with a hamus **Phylini**

KEYS TO THE GENERA

TRIBE MIRINI Douglas and Scott

- Head exserted, distinctly narrowed behind the eyes, which are not contiguous to the anterior angles of pronotum; pronotum with a distinct collar 1
- Head not obviously exserted, eyes contiguous to the anterior angles of pronotum, or nearly so 2
1. Head strongly exserted, eyes being located at about the middle; median sulcus of the vertex short but distinct.....1. *Collaria* Prov.
- Head little exserted, eyes being located near to the hind margin of the head but distinctly separated from the anterior angles of pronotum; vertex transversely depressed between the eyes, median sulcus nearly or quite obsolete 2. *Miris* Fabr.
2. Base of pronotum truncated or a little emarginate at the middle..... 3
- Base of pronotum concavely arcuated, leaving the base of scutellum broadly exposed 5
3. Basal lobe of scutellum covered by pronotum..... 3. *Stenodema* Lap.
- Basal lobe of scutellum exposed 4
4. Body narrow, elongated; head one-third longer than broad, nearly or quite as long as the pronotum 4. *Megaloceraea* Fieb.
- Body more ovate; head short, not longer than broad, much shorter than the pronotum 5. *Mesomiris* Reut.
5. Large areole of the membrane entirely hyaline; head long and pointed, with the median sulcus deep 6. *Trigonotylus* Fieb.
- Large areole of the membrane, or at least its outer half, opaque punctate; head short, transversely flattened at base, median sulcus obsolete, or nearly so 7. *Teratocoris* Fieb.

TRIBE HORISTINI n.d.

- Head short, vertical, when viewed from the side nearly square at apex, gula almost obliterated; elytra parallel, or the costa regularly and feebly arcuated; second joint of hind tarsi not more than half the length of the first 1
- Head a little oblique, when viewed from the side distinctly produced and narrowed toward the apex, gula quite long, oblique; elytra considerably expanded beyond the middle; second joint of hind tarsi nearly or quite as long as the first 2. *Opisthuria* Reut.
1. Vertex and front more or less convex, front not at all tumidly projecting before the clypeus; sides of pronotum anteriorly carinate only across the incisure separating the collum....1. *Platytyellus* Reut.
- Front tumid, projecting prominently before the base of the clypeus; pronotal margins anteriorly carinate to behind the callosities 3. *Oncerometopus* Reut.

TRIBE CAPSINI Reuter

KEY TO THE DIVISIONS

- Body linear, constricted at the middle; pronotum swollen at its middle and as wide there, or wider, than on hind margin....1. *Myrmecoraria*

- Body rarely linear and constricted at the middle, pronotum in this case widest behind 1
1. Arolia free, divergent, usually more or less curved and clavate 2
- Arolia absent, their place taken by two parallel setae; membrane often uniareolate; body robust, polished5. **Deraeocoraria**
2. Body above impunctate, or with fine aciculate punctures only..... 3
- Body above, or at least the pronotum, coarsely distinctly punctate, polished, callosities prominent4. **Capsaria**
3. Form more elongate, parallel or subparallel, cuneus at most but slightly depressed and the fracture small2. **Phytocoraria**
- Form more ovate, elytra more distinctly convex, the cuneus strongly deflexed and the fracture deep3. **Dichrooscytaria**

DIVISION 1. MYRMECORARIA Reut.

- Head constricted into a short neck behind the eyes; clypeus prominent, convex, its base distinct from the front; pronotal collar with a distinct incised line behind1. **Mimoceps** Uhl.
- Head not constricted behind the eyes; clypeus depressed, merged with the front; stricture of pronotal collar evenescent at its middle
.....2. **Pithanus** Fieb.

DIVISION 2. PHYTCORARIA Reut.

- Body above opaque and impunctate 1
- Body above more or less distinctly polished, sometimes shagreened or aciculate-punctate and almost opaque 4
1. Form linear, constricted at the middle; pronotum produced, almost cylindrical before; vertex sulcate1. **Paraxenetus** Reut.
- Body not constricted at the middle, pronotum trapezoidal; vertex not obviously sulcate 2
2. First antennal joint thickened and clothed with flattened hairs
.....2. **Neurocolpus** Reut.
- First antennal joint without flattened hairs..... 3
3. Hind femora linear, terete or nearly so4. **Ecertobia** Reut.
- Hind femora ligulate, flattened, broadest near the base and tapering from middle to apex3. **Phytocoris** Fall.
4. Head not or scarcely vertical, when viewed from the side distinctly narrowed below antennae; gula oblique 5
- Head vertical, thick and cylindrical below antennae; gula nearly or quite parallel with tylus10
5. Second antennal joint strongly clavate, fusiform, more tapering toward base10. **Garganus** Stal.
- Second antennal joint sometimes moderately thickened but not strongly clavate 6
6. Vertex not sulcate at base 7
- Vertex sulcate at base 8
7. First joint of hind tarsi shorter than the second.....9. **Ganocapsus** Van D.
- First joint of hind tarsi much longer than the second.....8. **Stenotus** Reut.

- 8. Face opaque, distinctly obliquely striate; sulcus conspicuous; clypeus not at all polished; callosities inconspicuous.....5. **Creontiades** Dist.
- Face polished, without distinct striae; sulcus inconspicuous; clypeus polished; callosities conspicuous 9
- 9. Sides of pronotum carinate; collar broad; head subhorizontal; eyes small, oblique6. **Allorhinocoris** Reut.
- Sides of pronotum ecarinate, rounded; collar very slender; head nearly vertical and thick at apex, extending but little below the large vertical eyes7. **Adelphocoris** Reut.
- 10. Second antennal joint clavate, clavate portion occupying the apical third and strongly flattened and sulcate above; vertex without a sulcus; surface polished, nude11. **Ectopiocerus** Uhler
- Second antennal joint linear, not at all clavate; surface above clothed with a close pubescence11
- 11. Whole upper surface closely, minutely shagreened, giving the insect an opaque aspect; vertex sulcate at base; antennae inserted much below the eyes13. **Thyrillus** Uhler
- Upper surface more polished; base of vertex with a transverse groove but scarcely prolonged at the middle in a sulcus; antennae inserted close against the lower angle of the eyes12. **Irbisia** Reut.

DIVISION 3. **DICHRROSCYTARIA** Douglas and Scott

- Upper surface opaque or nearly so, clothed with short pubescence 1
- Upper surface highly polished, nude; form broad-ovate; cuneus strongly deflexed 6
- 1. Pronotum marked with a pair of round black points, occasionally wanting in specimens not fully colored 2
- Pronotum without the pair of round black points: 4
- 2. Basal joint of antennae terete, or nearly so 3
- Basal joint of antennae strongly compressed, nearly as wide as hind femora2. **Lampethusa** Dist.
- 3. Second antennal joint linear; first joint with but few minute hairs, not, or scarcely, longer than the head4. **Calocoris** Fieb.
- Second antennal joint thickened toward the apex; first joint densely pubescent, hairs nearly or quite as long as the thickness of the joint3. **Paracalocoris** Dist.
- 4. Antennae stout, second joint strongly clavate, third and fourth abruptly slender and together scarcely longer than the first; body broad oval, densely sericeous-pubescent; scutellum tumid... 1. **Pynocoris** Van D.
- Antennae slender, second joint linear, third and fourth joints together nearly or quite as long as the second 5
- 5. Head exerted, the small rounded eyes not overlapping pronotal angles; base of clypeus when viewed from above much anterior to the insertion of antennae5. **Poeciloscytus** Fieb.
- Head broad and short, closely set against pronotum, the large eyes overlapping its anterior angles; base of clypeus when viewed from above in a line with base of antennae6. **Dichroscytus** Fieb.

6. Rostrum long, reaching at least to intermediate coxae; pronotum with obscure scattering impressed points, but not at all punctate 7. **Horcias** Dist.
- Rostrum short, not surpassing anterior coxae; pronotum obscurely punctured 8. **Poecilocapsus** Reut.

DIVISION 4. CAPSARIA Reut.

- Vertex sulcate and transversely striate; second joint of hind tarsi much shorter than first and third 4. **Platylygus** Van D.
- Vertex more or less polished, scarcely striate or sulcate; first and second tarsal joints subequal 1
1. Elytra nearly flat, cuneus at most but moderately deflexed 2
- Elytra more convex, cuneus much deflexed and the fracture deep..... 6
2. First and second antennal joints rather thick, the second linear and scarcely thinner than the first, or in the female slightly attenuated at base and apex 3
- Second antennal joint more or less distinctly thickened toward its apex; sometimes sublinear but then distinctly thinner than joint one 4
3. Base of vertex flattened, hind margin carinate; base of scutellum but little exposed; elytra oblong, parallel 3. **Lygidea** Reut.
- Vertex convex, polished, its base ecarinate; base of scutellum broadly exposed; body oval, distinctly broader behind the middle; color red 2. **Coccobaphes** Uhl.
4. Third and fourth antennal joints abruptly thinner and together scarcely more than half the length of the second joint, which is linear and moderately thickened but thinner than first 6. **Tropidosteptes** Uhl.
- Antennae slender, third and fourth joints setaceous and together at least two-thirds the length of the second 5
5. Form more ovate; sides of the pronotum carinate..... 7. **Neoborus** Dist.
- Form more elongated and subparallel; sides of the pronotum ecarinate 8. **Xenoborus** Reut.
6. Inner cheeks tumidly convex, forming almost a tubercle beyond base of antennae; second antennal joint clavate; pronotum coarsely punctured; head broad behind and concentric with the anterior margin of pronotum 1. **Capsus** Linn.
- Inner cheeks convex but not prominently tumid; second antennal joint but little thicker at apex; pronotum more finely punctured; eyes rounded behind, head not concentric with the anterior margin of pronotum 5. **Lygus** Hahn.

DIVISION 5. DERAECORARIA Douglas and Scott

- Vertex transversely striate and longitudinally sulcate; second joint of hind tarsi much shorter than first and third 1
- Vertex more or less polished, scarcely striate or sulcate; first and second tarsal joints subequal 2

1. Second antennal joint clavate; third and fourth short and thick, fusiform; prosternal xyphus convex, but slenderly margined 2. **Diplozona** Van D.
- Antennae linear, of nearly equal thickness throughout; second joint scarcely enlarged at apex, third and fourth linear....1. **Cimatlan** Dist.
2. Elytra punctate, not bullate behind; basal joint of hind tarsi not produced below beyond the second 3
- Elytra impunctate, bullate behind, cuneus almost vertical; basal joint of hind tarsi thickened, oblique at apex and attaining the apex of second joint; head nearly vertical, but little produced before the eyes4. **Kloplicoris** Van D.
3. Head strongly produced and nearly horizontal, surpassing apex of short first antennal joint; second antennal joint thick and very long, nearly linear, longer than the remaining three joints taken together; sides of pronotum ecarinate3. **Eurychiloptera** Reut.
- Head less produced, not surpassing middle of basal antennal joint..... 4
4. Sides of pronotum carinate, antennae rather short and slender, apex of the second joint distinctly thickened; membrane often uniareolate; xyphus sometimes convex on the middle5. **Camptobrochis** Fieb.
- Sides of the pronotum ecarinate; antennae longer, basal two joints stout, the first surpassing the apex of the head by two-thirds its length, second a little thicker apically.....6. **Deraeocoris** Kirschb.

TRIBE BRYOCORINI Douglas and Scott

- Form oblong, more or less elongated, elytra parallel or subparallel..... 1
- Form shorter, ovate or subovate 4
1. Eyes on a suberect stylus which is at least as long as the width of the eye9. **Hesperolabops** Kirk.
 - Eyes sessil, or at most but substylate 2
 2. Eyes large, exserted or substylate; callosities convex, oblique, contiguous at middle of pronotum, leaving a transverse triangular punctured area before8. **Caulatops** Bergr.
 - Eyes smaller, not at all stylate; callosities more transverse, not contiguous at middle of pronotum 3
 3. Body opaque, pubescent; second joint of antennae long, about equaling basal width of pronotum7. **Dacota** Uhl.
 - Body smooth, more or less polished; second joint of antennae short, not longer than width of head6. **Sysinas** Dist.
 4. Pronotum with a prominent linear collar5. **Monolocoris** Dahlb.
 - Pronotum without a distinct collar 5
 5. Scutellum without a triangular discal impression 6
 - Scutellum with a triangular discal impression 7
 6. Embolium broadly expanded, about as wide as hind femora; pronotum strongly convex and bullate behind, with three longitudinal impressions4. **Pynoderes** Guer.
 - Embolium linear; pronotum convex but not at all bullate or longitudinally impressed behind3. **Sixeonotus** Reut.

7. Antennae inserted close to apex of the eye, basal joint very short, one-third shorter than width of front2. **Halticotoma** Reut.
 — Antennae inserted some distance above apex of the eye, last joint considerably longer than width of vertex and much surpassing clypeus1. **Cyrtocapsus** Stal.

TRIBE CLIVINEMI Reuter

- Second antennal joint linear; sides of pronotum without a distinct carina1. **Clivinema** Reut.
 Second antennal joint stout, clavate, apical two short and abruptly slender; sides of pronotum distinctly carinated2. **Largidea** Van D.

TRIBE CYLAPINI Reuter

- Form oval; head short, vertical; vertex with a deep longitudinal impression; antennae very long and slender, much surpassing tip of membrane; basal joint thickened, fusiform1. **Cylapus** Say

TRIBE FULVINI Uhler

- Body elongated; costa but feebly arcuate; sides of pronotum concavely arcuate, humeral angles prominent1. **Fulvius** Stal.
 Body broad-oval; costa strongly arcuate; sides of pronotum not at all concavely arcuate, humeri not prominent2. **Peritropis** Uhler

TRIBE HALLODAPINI n.n.

- Tarsal claws with arolia minute or wanting 1
 Tarsal claws with long parallel arolia; females sometimes wingless, formiciform 5
 1. Hind margin of pronotum with a median spine, behind which the edge is notched1. **Dacerla** Sign.
 — Hind margin of pronotum without spine or notch 2
 2. Head short, vertical, but little produced below the eyes 3
 — Head long, oblique, produced below the eyes for a distance nearly as great as the length of the eye 4
 3. Posterior lobe of scutellum tumidly elevated....2. **Cyrtopeltocoris** Reut.
 — Posterior lobe of scutellum transversely moderately convex, horizontal3. **Sericophanes** Reut.
 4. Posterior lobe of scutellum moderately convex, subcarinate; sides of pronotum almost rectilinear, a little curved outward at the humeri4. **Closterocoris** Uhler
 — Posterior lobe of scutellum tumidly elevated, subconical, as high as base of pronotum5. **Cyphopelta** Van D.
 5. Second antennal joint clavate6. **Orectoderus** Uhler
 — Second antennal joint linear7. **Coquillettia** Uhler

TRIBE DICYPHINI Reuter

- Hind margin of pronotum rectilinear, or slightly concavely arcuate; head vertical before, when viewed from the side not projecting before eyes; hind margin of callosities located considerably before the middle of the pronotum1. **Hyaliodes** Reut.

- Hind margin of pronotum concavely arcuate, leaving base of scutellum exposed; head sometimes nearly vertical but then narrowly but distinctly surpassing front line of eyes; hind margin of callosities nearly or quite attaining middle of pronotum 1
1. Head when viewed from the side distinctly produced and oblique; angle of face (angle of tylus and bucculae) subacute; eyes small and oblique, placed at middle of the head4. **Macrolophus** Fieb.
- Head vertical or nearly so; apex of head truncated, facial angle a right angle; eyes large and vertical 2
2. Head produced in a distinct neck behind eyes, space behind the eye when viewed from the side about as long as width of the eye2. **Dicyphus** Fieb.
- Head scarcely produced behind the eye, forming but a very slender margin there of about the width of pronotal collum3. **Engytatus** Reut.

TRIBE ORTHOTYLINI n.n.

KEY TO THE DIVISIONS

- Head broad with eyes stylate, their inner margins being beyond the pronotal angles1. **Laboparia** Reut.
- Head sometimes broad but eyes not at all stylate 1
1. Head broad, hind margin sharp, concentric with or overlapping anterior margin of pronotum 2
- Head not unusually broad, not concentric with or overlapping anterior margin of pronotum; eyes rounded behind 3
2. Form broad-oval; hind femora often broad, saltatorial; clypeus distinct from the front2. **Halticaria** Kirk.
- Form elongated, body often constricted at the middle; hind femora normal; clypeus depressed and fused with the front3. **Pilophoraria** Reut.
3. Apical two joints of antennae not thinner than the second4. **Ceratocapsaria** n.n.
- Apical two joints of antennae abruptly thinner than the second, setaceous, or nearly so 4
4. Base of vertex and sides of pronotum sharply carinate; anterior margin of pronotum sometimes distinctly elevated in a ridge by a transverse depression before callosities; body opaque...5. **Lopidearia** n.n.
- Base of vertex and sides of pronotum sometimes more or less carinate; anterior margin of pronotum in this case not at all elevated6. **Orthotyleria** n.n.

DIVISION 1 LABOPARIA Reut.

But one North American genus**Labops** Burm.

DIVISION 2. HALTICARIA Reut.

- Antennae long, setaceous, as long as entire body; hind femora greatly flattened, saltatorial1. **Halticus** Hahn.
- Antennae scarcely longer than elytra; hind femora not greatly widened nor saltatorial2. **Strongylocoris** Blanch.

DIVISION 3. PILOPHORARIA Reut.

- Head with eyes little wider than anterior margin of pronotum; sides of pronotum not arcuated; body not constricted at the middle; upper surface ornamented with dots of silvery hairs 1. **Heterocordylus** Fieb.
- Head much wider than anterior margin of pronotum; sides of pronotum arcuate; body constricted at the middle; elytra sometimes with transverse lines of silvery hairs 1
1. Second antennal joint distinctly clavate; body constricted at the middle; elytra usually ornamented with transverse lines of pale scale-like hairs 2. **Pilophorus** Hahn.
- Second antennal joint almost linear; body scarcely constricted at the middle; elytra without transverse lines of scale-like hairs 3. **Alepidia** Reut.

DIVISION 4. CERATOCAPSARIA n.n.

- Pronotum anterior to the middle nearly cylindrical, then rather abruptly flaring to the humeri; elytra sparsely clothed with long hairs 1. **Pamilia** Uhl.
- Pronotum regularly narrowing anteriorly, its sides not constricted at the middle 1
1. Elytra parallel; head vertical 2. **Tiryas** Kirk
- Elytra with costa more or less arcuate; head obviously oblique 3. **Ceratocapsus** Reut.

DIVISION 5. LOPIDEARIA n.n.

- Vertex prominent, convex, its base strongly carinate across its whole width; anterior edge of pronotum not elevated.... 3. **Hadronema** Uhl.
- Base of vertex carinate only at the middle, carina not reaching the eye, anterior margin of pronotum elevated 1
1. Basal two joints of antennae incrassate, the second narrowed toward its apex and sometimes flattened in males..... 1. **Lomatopleura** Reut.
- Second antennal joint linear or nearly so..... 2. **Lopidea** Uhl.

DIVISION 6. ORTHOTYLARIA Douglas and Scott

- Pronotum constricted behind callosities, constriction continued over the sides, body elongated 1
- Pronotal stricture if present not continued over the sides 2
1. Posterior coxae distant; basal joint of antennae a little longer than head; pronotum with a collar-like constriction 1. **Pseudoxenetus** Dist.
- Posterior coxae contiguous; basal joint of antennae short, scarcely surpassing clypeus 2. **Globiceps** Fieb.
2. Eyes placed near or before the middle of sides of head 3
- Eyes placed on hind margin of head, vertex not continuing around behind the eyes 4
3. Head a little triangularly produced before the eyes; vertex and front together convex, base of the former rounded over and not at all carinate; elytra parallel; membrane biareolate.... 3. **Paraproba** Dist.

- Head truncate before, not produced before eyes; vertex broadly excavated, base arcuated and carinate; elytra broad, the embolium well developed; areoles of membrane merged into one, dividing nervure nearly or quite obsolete, their surface similar in structure to the diaphanous corium and cuneus4. **Hyalochloria** Reut.
- 4. Eyes rounded behind, in conformity with the curve of the base of the vertex, thus bringing eyes away from pronotal angles; base of vertex ecarinate in the male, very obtusely carinate in the female; elytra ample, flat, subhyaline5. **Diaphnidia** Uhl.
- Hind margin of vertex and eyes forming nearly or quite a straight line, thus bringing eyes into proximity to pronotal angles 5
- 5. Tender whitish insects with elytra a little wider than humeri; basal joint of antennae lineate with black exteriorly; vertex ecarinate.6. **Reuteria** Put.
- Sometimes tender and whitish, then with vertex carinate at base and first antennal joint without a black line 6
- 6. Vertex with a distinct carina at base behind a transverse impression, this impressed area sometimes with a foveate dot on either side... 7
- Vertex without a distinct basal carina; sometimes tumid at base, simulating an obtuse carina, with surface before it broadly triangularly depressed 8
- 7. Head viewed from the side short, apex never produced the length of the eye below its lower angle; pronotum without a round black spot behind callosities7. **Orthotylus** Fieb.
- Head viewed from the side longer, apex produced at least the length of the eye below its lower angle; pronotum with an impressed round spot behind outer angle of callosities.....8. **Inacora** Reut.
- 8. Head vertical, with an oblique impression either side on vertex; clypeus prominent, convex, well distinguished at base; body above smooth, clothed with deciduous black hairs and minute silvery scale-like hairs (type *Macrotylus angularis* Uhl)....11. **Pseudopsallus** n. gen.
- Vertex without an oblique impression at base 9
- 9. Pronotum with its base elevated above base of scutellum, strongly declinate anteriorly, its vertical height about equal to that of head; basal two joints of antennae flattened; body opaque, hirsute, elytra marked with black and white9. **Semium** Reut.
- Pronotum not greatly raised above base of vertex and little above the level of scutellum; antennae not flattened10
- 10. Hind femora normal, not saltatorial11
- Hind femora very broad (nearly one-third its length), saltatorial; head short, vertical; vertex ecarinate; basal antennal joint short, scarcely surpassing apex of tylus15. **Parthenicus** Reut.
- 11. Head transverse, vertical, viewed from above not projecting before eyes; pronotum campanulate, humeri prominent; males with their second antennal joints clavate.....10. **Mecomma** Fieb.
- Head viewed from above angularly produced before the line of the eyes; pronotum trapezoidal, humeri not abruptly prominent; antennae never clavate12

12. Head vertical; dimorphic, females ovate, with eyes strongly arcuated and membrane abbreviated, males with elytra parallel; green or green and black insects12. **Labopidea** Uhl.
 — Head oblique, produced before eyes for about length of eye13
13. Large green ovate species, with the body narrowed before and behind, tylus moderately produced; rostrum reaching to middle of venter (type *Macrotylus vestitus* Uhl.).....13. **Macrotyloides** n. gen.
 — Smaller and more slender species, with the body linear; tylus compressed and semicircularly prominent, occupying about half the length of head beyond apex of eyes14. **Argyrocoris** Van D.

TRIBE PHYLINI Douglas and Scott

- Prosternal xyphus depressed on its disk, its margin more or less elevated; arolia rather long and flattened, usually united with the claws
Division 1. **Oncotylaria** Reut.
- Prosternal xyphus convex, immarginate; arolia short and united with the claws or wanting.....Division 2. **Phylaria** D. and S.

DIVISION 1. ONCOTYLARIA Reut.

- Tarsal claws short and strongly incurved; arolia free, laminate, as long as the claws; clypeus prominent, viewed from the side strongly curved1. **Macrotylus** Fieb.
- Tarsal claws longer, nearly straight, or somewhat curved toward their apex 1
1. Head long, rostrate-produced, when viewed from the side projecting before the eye for about twice the length of the eye; prosternal xyphus sometimes moderately convex, but a distinct marginal carina can be seen when vestiture is removed; body broad, ovate, much narrowed before; surface clothed with a fine whitish vestiture intermixed with stiff black hairs2. **Haplomachidea** Reut.
- Head not produced before the eye for more than length of the eye; body oblong or elongated, clothed with a minute or uniform vestiture 2
2. Clypeus prominent, its base but poorly distinguished from the front, placed much above the line of antennae; basal lobe of scutellum much exposed; arolia long, exceeding apex of claws, with which they are united for their whole length.....3. **Onychumenus** Reut.
- Clypeus moderately prominent, its base well distinguished from the front and placed a little above the line of antennae; base of pronotum rectilinear, leaving basal lobe of scutellum but narrowly exposed; arolia slender, becoming free toward their apex and surpassing the middle of the claws.....4. **Oncotylus** Fieb.

DIVISION 2. PHYLARIA Douglas and Scott

- Head more or less produced; when viewed from the side having facial angle (between bucculae and line of clypeus) less than a right angle 1

- Head not or scarcely produced, when viewed from the side having the facial angle nearly or quite a right angle10
1. Clypeus broad, depressed; first antennal joint not or scarcely surpassing clypeus3. **Sthenarus** Fieb.
- Clypeus prominent, convex 2
2. Femora black or pale and dotted in longitudinal series; rarely pale without dots, then with tibiae dotted and marked with a darker or black spot at base 3
- Femora pale and irregularly dotted with darker or black; often without dots, then with tibiae pale without black points 7
3. Head rostrate-produced, projecting before the eye for a distance much greater than length of eye; second antennal joint broadly flattened in the male; femora black5. **Criocoris** Fieb.
- Head not produced before the eye for a space greater than width of the eye; second antennal joint linear in both sexes 4
4. Femora black; body above conspicuously clothed with white hairs.10. **Apocremnus** Fieb.
- Femora pale, dotted in longitudinal series; rarely black, then the body above with a fine pale pubescence only 5
5. Tibiae dotted; antennae with second joint uniformly colored, or if partly colored paler at middle or apex 6
- Tibiae pale without dots, bristles only dark; femoral dots sometimes obsolete above; antennae with second joint black on apical half.7. **Rhinocapsus** Uhl.
6. General color of whole body red or reddish-brown8. **Gerhardiella** Popp.
- General color pale, whitish or tinged with yellow, marked more or less with fuscous or black areas, sometimes entirely black9. **Plagiognathus** Fieb.
7. Femora pale and irregularly dotted, at least below.....2. **Psallus** Fieb.
- Femora pale without dots 8
8. Color uniformly black or nearly black above, legs pale 9
- Color pale, more or less marked with fuscous or black above1. **Beuteroscopus** Kirk.
9. First antennal joint surpassing clypeus by more than half its length; body polished and nude above6. **Microphylellus** Reut.
- First antennal joint scarcely surpassing apex of clypeus; body above clothed with pale pubescence4. **Leptotylus** n. gen.
10. Vertex distinctly carinate at base; rostrum short, but little surpassing the anterior coxae15. **Myochroocoris** Reut.
- Vertex without a basal carina; rostrum longer11
11. Second antennal joint linear, neither clavate nor flattened12
- Second antennal joint clavate or flattened and broader than first joint21
12. Clypeus well distinguished from the front by an incised suture13
- Clypeus confused with the front or with suture very obscure; size small (2-3 mm.)17

13. Hind femora not at all saltatorial, not wider than the eye viewed from the side, pale, dotted in longitudinal series; tibial bristles black and inserted in black points; first joint of rostrum scarcely attaining base of head14
 — Hind femora saltatorial, much thickened or flattened, distinctly wider than lateral width of the eye15
14. Head broad, its width three-fourths that of hind margin of pronotum; viewed from the side produced below the eye for a distance as great as length of eye12. **Bolteria** Uhl.
 — Head narrower, hardly more than half as broad as basal width of the pronotum; viewed from the side shorter, produced below the eye for hardly more than half length of the eye; body densely clothed with white deciduous hairs11. **Oligotyus** n. gen.
15. Femora black, tarsi annulated with white; body small, black
20. **Strophopoda** n. gen.
 — Femora pale, dotted with fuscous or black points16
16. Base of clypeus on a line with the insertion of antennae
16. **Atomoscelis** Reut.
 — Base of clypeus above line connecting base of antennae
17. **Europiella** Reut.
17. Third joint of hind tarsi as long as first and second together; arolia short, linear; attached to base of claws.....18. **Tuponia** Reut.
 — Third joint of hind tarsi subequal to second, or shorter18
18. Head broad, about one-fifth narrower than hind margin of pronotum; body black, hind femora black19. **Chlamydatus** Curt.
 — Head narrower; body, including legs, pale19
19. Head viewed from the side forming a squarish projection below the eyes; legs and antennae pale, immaculate; tibial spines black; body pale, clothed with short, thick black hair...23. **Maurodactylus** Reut.
 — Head forming a very short angular projection below the eyes.....20
20. Legs pale, femora immaculate; second antennal joint annulate with black22. **Cylloceps** Uhl
 — Legs pale, hind femora dotted with black; first antennal joint annulate with black21. **Campylomma** Fieb.
21. Second antennal joint terete, but little thickened at apex, longer than third and fourth together24. **Rhinacloa** Reut.
 — Second antennal joint of the male broadly flattened22
22. Body black, elytra pale brown, bifasciate with white
14. **Leucopoecila** Reut.
 — Body entirely blue-black, or only coxae pale.....13. **Atractotomus** Fieb.