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KEY TO THE NEARCTIC GENERA AND SPECIES OF
GEOCORINÆ.

(HETEROPTERA; LYGAEIDÆ.)

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This paper is based largely on material contained in the U. S. National Museum, for the privilege of using which the writer is indebted to Messrs. J. C. Crawford and Otto Heidemann. Mr. W. D. Pierce also kindly submitted for examination the specimens collected by the staff of the Southern Crop Insects Investigation.

The key includes 9 species and 8 varieties, and the paper makes some reference to every form known to have been described from the Nearctic realm except *Geocoris duzei* Montandon.

The earlier descriptions of species of Geocorinae, like those of many other groups, often are descriptions of single specimens. As a rule, one may also say, color characters only are mentioned. It remains therefore for subsequent writers to fix the description upon some form, and to point out structural characters sufficient to properly distinguish the species.

Color is not only extremely variable, but in the Hemiptera at least depends very much on age of the individual. In using color characters it must also be remembered that albinistic or melanistic forms of any of the species may occur, and that the structural characters variable as they also are must be allowed to decide the identification. In the species of Geocorinae represented in the United States, the color pattern of the undersurface is remarkably uniform. This is not to say that there may not be considerable variation in the details, but any of the species

may have the following pale markings: spots antero-laterad of each coxa, front margin of prostethium, triangular outline or area on underside of head, and whole of legs. The coxae themselves and narrow lateral margins of abdominal segments also are commonly pale.

Because of this uniformity of lower surface, little attention is paid to that part of the body in the following pages. Unless otherwise stated, it will be understood that descriptions of form as well as color apply to the insect as viewed directly from above. The typical color pattern is most persistent on back part of head, middle of pronotum, base of scutellum and inner angle of corium. These parts should be scrutinized when there is doubt as to the ground color.

All of the species may have brachypterous forms, and these sometimes differ remarkably in appearance from the typical aspect. These short-winged specimens appear more oval and broader, this being intensified by the fact that the hemelytra usually are not overlapped so closely as in perfect-winged individuals. This condition also alters the apparent shape of the scutellum, allowing more of it to be seen. The corium of brachypterous specimens is invariably more densely and uniformly punctate than in the macropterous forms.

Finally it should be remembered that there are few hard and fast lines and that it can not be expected that a key will be simple and unerring when the group it is intended to analyze is complex and confusing.

KEY TO THE GENERA OF GEOCORINÆ OF THE WORLD.

The following key is made largely from descriptions and for that reason is undoubtedly less satisfactory than would be the case were specimens of all the groups in hand.

A. First joint of antenna longest; clavus widened posteriorly; eyes on long slender styles, directed outward and forward.

Epipolops Herrich-Schaeffer.

AA. First joint of antenna shortest; clavus not at all or only slightly widened posteriorly.

B. Eyes somewhat pedicillate.

C. Part of head bearing eye not at all or very little retrorsely produced, and not fitted to anterior angle of the pronotum. Tylus short, not sulcate; clavus with sides subparallel or feebly divaricate posteriorly. Odoriferous orifices scarcely visible.

Ophthalmocoris Montandon.

CC. Part of head bearing eye somewhat retrorsely produced, paralleling or almost touching anterior angle of thorax.

D. Tylus not sulcate.

E. Clavus parallel-sided, commissure distinct.

Germalus Stal.

EE. Clavus attenuate at apex, commissure lacking.

Stenophthalmicus Costa.*

DD. Tylus sulcate; Thorax much narrowed in front, part of head bearing eye extended laterally and constricted so that eye appears almost stalked; Bucculae small; second joint of beak subequal to first, thoracic callosities continuous or interrupted by only a few scattered punctures; scutellum notably longer than wide, almost plane, uniformly, but sparsely punctate; Clavus distinctly narrowed behind, commissure short.

Isthmocoris new genus.

Type species: *Salda picea* Say; included species: the type, *Geocoris imperialis* Distant and *G. tristis* Stal.†

BB. Eyes not at all pedicillate.

Geocoris Fallen.‡

KEY TO THE NEARCTIC GENERA AND SPECIES.

A. Eyes entirely laterad of point of apparent junction of head and thorax; second joint of beak not noticeably shorter than first.

Isthmocoris.

B. Punctures on corium mostly confined to the margins, chiefly near clavus.

I. imperialis Distant.

BB. Corium more uniformly punctate.

I. piceus Say.

AA. Eyes not so protruding; second joint of beak noticeably shorter than first.

Geocoris.

C. Scutellum with lateral callosities; anterior angles of pronotum evenly rounded.

G. punctipes Say.

CC. Scutellum without lateral callosities; anterior angles of pronotum usually truncate or angulately rounded.

D. Scutellum obviously longer than wide (sometimes subequilateral in small specimens of *G. bullatus* Say and var. *discopterus* Stal), strongly convex or in part elevated, almost always bicolor.

* See Puton, A, et Lethierry. L. Hemipteres nouveaux de L'Algerie. Revue D'Entomologie. VI, 1887, p. 301.

† Montandon suggests (Annales Musei Nationalis Hungarici, V, 1907, p. 90) that these species should be assigned to the genus *Germalus* Stal. There are objections to this course, however. *Germalus* is described as having the bucculae distinctly elevated anteriorly, the clavus with sides parallel, and the tylus not sulcate. *Isthmocoris imperialis* and *piceus*, on the other hand, have the bucculae not more prominent than in our species of *Geocoris*, the clavus distinctly narrowed behind, and the tylus sulcate.

‡ For key to subgenera of *Geocoris*, see Stal, C., Genera Lygaeidarum Europae disposuit. Öfv. Kgl. Vet. Akad. Forh., 1872, No. 7, pp. 45-46.

- E. Upper surface more depressed, pronotum less convex, sometimes sunken in the middle behind callosities; scutellum not evenly and strongly convex, either low convex with median smooth line elevated, the scutellum therefore somewhat roof-shaped, or sometimes elevated at or near base, or with a Y-shaped elevated area. Ground color more grayish.
G. bullatus Say.
- EE. Upper surface more convex; pronotum rounded, sometimes sub-depressed; scutellum very convex, evenly rounded, median line usually scarcely elevated, or elevated Y-shaped area sometimes present. Ground color more yellowish.
G. decoratus Uhler.
- DD. Scutellum about equilateral (subequilateral in *G. atricolor* Montandon), smoothly low convex, or almost plane; almost always unicolor.
- F. Head almost smooth, with a sharply impressed line running from near apex of tylus well up on vertex.
G. scudderi Stal.
- FF. Head granular, impressed line when present, broader, less distinct and interrupted at base of tylus.
- G. Median smooth line of pronotum well defined, percurrent or nearly so, and slightly carinate.
G. carinatus new species.
- GG. Median smooth line of pronotum poorly defined, usually incomplete and not at all carinate.
- H. Form more oblong, pronotum more elongate, scutellum narrower; piceous with a steely bluish glint, pale margins of hemelytra usually narrow or lacking.
G. atricolor Montandon.
- HH. Form more oval, pronotum more transverse, scutellum strictly equilateral; without steely bluish glint, more or less broad margins of hemelytra pale.
G. uliginosus Say.

Isthmocoris imperialis Distant.

Geocoris imperialis Distant, *Biologia Centrali-Americana Rhynchota Hemiptera—Heteroptera* I, pp. 197–8, 1882, Pl. xviii, fig. 18. [Duenas, Guatemala].*

Scutellum, adjacent parts of pronotum and under surface, except of head, piceous; hemelytra straw color; front and lateral margins of pronotum, head and legs chiefly yellowish; these parts and hemelytra sometimes much infuscated. Length 3.5 to 4 mm.

Specimens in the collections examined were obtained at Bayou Sara, Louisiana, San Antonio, Texas, and Los Angeles and San Bernardino, California. The species was described from Duenas, Guatemala. Mr. H. G. Barber† reported the species as new to our fauna, on the basis of a specimen collected in the vicinity of Brownsville, Texas, in 1903 or 1904. It is interesting to note, therefore, that the specimens from the first two localities cited above were collected by Mr. E. A. Schwarz in January, 1879, and December, 1878, respectively.

Isthmocoris piceus Say.

Salda picea Say, *Descriptions of new species of Heteropterous Hemiptera of North America*, New Harmony, Indiana, Dec., 1831, p. 18.‡ Complete writings of Thomas Say on the entomology of North America, Vol. I, 1859, p. 336. [Massachusetts.]

Scutellum, pronotum and under surface, except of head, piceous; hemelytra fuscous to piceous; head and legs chiefly yellowish. Most of the specimens examined are brachypterous, and in these the clavus and corium are fused, the claval suture being nearly or quite obsolete. Length 3.25 to 4 mm.

Specimens examined are from Andover, Massachusetts; Portland, Connecticut; New York, Pennsylvania, and Colorado.

Geocoris tristis Stal. (Nya hemiptera, Öfversigt af Kongl. [Svenska] Vetenskaps Akademiens Förhandlingar, 11, No. 8, 1854, p. 236 [California]; Hemiptera, species novas descripsit. Kongliga Svenska Fregatten Eugenie's Resa. Zoology I Insecta, 1859, p. 249 [San Francisco, California]) probably is a synonym of one or the other of the above species. This question can not be definitely settled, however, without study of Stal's material. Judging from the known ranges of *piceus* and *imperialis*, the latter is most likely prove a synonym of *tristis*.

In case Stal's name is found to apply it will, under the law of priority, have precedence. This result would be but another instance among a great many in which the current name of a species is based upon non-typical specimens from an outlying part of the range. The name *tristis*

* References are given in full the first time cited, and abbreviated thereafter.

† Bull. Brooklyn Museum, Vol. I, No. 9, Oct., 1906, p. 275.

‡ Pagination of this paper according to Banks, N. Catalogue of the Nearctic Hemiptera-Heteroptera. 1910, p. 69.

would certainly be a misnomer for this the most gaily colored of our species of *Geocoris*.

***Geocoris punctipes* Say.**

Salda bullata var. *a punctipes* Say, Heteropterous Hemiptera of North America, New Harmony, Indiana, Dec., 1831, p. 18. Complete writings, Vol. 1, 1859, p. 336. [United States.]

Ophthalmicus luniger Fieber, Die Gattung Ophthalmicus, Wiener Entomologische Monatschrift, V, 1861, p. 269. [Carolina.]

Median line of scutellum free from punctures, this smooth area usually connected with callosities, forming a polished Y-shaped area which is more or less elevated. Pronotum, scutellum (except smooth space described), and corium, near clavus, strongly punctate. Scutellar callosities, almost invariably yellow or orange. Thoracic callosities, and most of head and scutellum, usually piceous; these may vary to straw color, except that the scutellum apparently always retains some dark color along the median line at base; most of pronotum, corium and legs usually straw to yellow, may vary to fuscous. Length 3.5 to 5 mm. Range: From New Jersey to Florida, California, Texas and Guatemala.

***Geocoris punctipes* variety *paulus* new variety.**

A very small (3 mm.) form of this species which has only vestiges of the scutellar callosities may be known as variety *paulus*. Type in collection of U. S. National Museum.

The single specimen at hand is from Kern County, California. Were it not for the fact that the general form, especially of the pronotum, is exactly like that of *punctipes* (and that species is unique in our fauna), one would at once pronounce this specimen a representative of a new species characterized by evenly rounded anterior angles of thorax and absence of scutellar callosities. I am of the opinion however that its relationships are best expressed by calling it a variety of *punctipes*.

The size of the scutellar callosities varies considerably in *punctipes*, and in the specimen now considered, the scutellum is almost uniformly punctate, only mere traces of calloused surface being discernible. Certain specimens of *bullatus* and *decoratus* might more correctly be said to have callosities than this individual. The variety here named is not traceable by the key as it now stands.

The color is much as in a pale example of *punctipes*. Head and thoracic callosities yellow, former with a dark shade on vertex, and dark traces about tylus. Thorax and scutellum dark punctured, surface between punctures also darker near thoracic callosities and base of scutellum. General color of pronotum, scutellum and corium, testaceous; membrane hyaline. General color of undersurface fuscous, gular triangle, front margin of prostethium, coxae and coxal spots, ivory white; legs light brown.

Geocoris bullatus Say.

Saldà bullata Say, Heteropterous hemiptera of North America, New Harmony, Indiana. December, 1831, p. 18. Complete writings, Vol. I, 1859, p. 336. [United States.]

In this species the sides of body are more arcuate on the average than in *decoratus* and the upper surface flatter. The ground color is more griseous, and opaque and there is more of a semicalloused, porcelain-like appearance to the interspaces on punctured parts of body.

The forms of *bullatus* may be distinguished as follows:

- a. Averaging smaller, corium with fuscous markings only on internal angle or along posterior margin.
- b. Scutellum bicolored.
- c. Scutellum usually more densely punctate, excluding marginal rows, there are on one-half the disk, 20 or more punctures.
bullatus var. *bullatus* Say.
- cc. Scutellum usually less densely punctate, excluding marginal rows, there are on one-half the disk, 15 or fewer punctures.
bullatus var. *discopterus* Stal.
- bb. Scutellum entirely black.
bullatus var. *obscuratus* Montandon.
- aa. Averaging larger, corium entirely fuscous to piceous.
bullatus var. *borealis* Dallas.

Geocoris bullatus var. **bullatus** Say. Loc. cit.

Ophthalmicus griseus Dallas, List . . . of Hemipterous Insects . . . of the British Museum, Part II, 1852, p. 585 [North America].

Ground color griseous to light yellow, head usually with much black, 3 spots on hind margin, spot at base, and three on upper surface of tylus and cheeks, and spots usually present in callosities, yellow to orange; band across pronotum in region of callosities (sometimes pronotum in general), basal region, middle line and apical part of scutellum black; membranous margin of corium fuscous or with fuscous spots. Pronotum, scutellum and clavus and marginal parts of corium copiously dark punctured, dark color sometimes reducing or obscuring the spots or vittae on scutellum and other parts of ground color usually clear.

A brachypterous specimen has the fore part of pronotum and scutellum piceous, upper surface of these and hemelytra heavily dark punctured throughout, and head, and legs light reddish brown.

Length 3.25 to 4.25 mm. Range: Maine to Minnesota, Colorado, California, Mississippi and Maryland.

Geocoris bullatus var. **discopterus** Stal.

Geocoris discopterus Stal, Enumeratio Hemipterorum, 4, Kgl. Svenska Vet. Akad. Handl. 12, No. 1, 1874, p. 136 [New Jersey].

A small, coarsely punctate, brachypterous form which intergrades with variety *bullatus*.

Large quadrate spot on head, or sometimes whole head black, in latter case, set off by a few yellow points, as ocelli, eye-margins, spots on tylus, etc.; pronotum usually piceous around callosities, general color elsewhere, two spots or vittae on scutellum, and most of corium, straw to yellow; corium usually more or less infuscate on disk. Length 2.75 to 3.25 mm. Range: From Massachusetts and New Jersey to Colorado.

Geocoris bullatus var. **obscuratus** Montandon.

Geocoris bullatus var. *obscuratus* Montandon, *Especies nouvelles ou peu connues du genre Geocoris* Fall. Bul. Soc. Sci. Bucarest XVI, Nos. 5-6, Sept.-Dec. 1907, p. 220 [Boulder, Colorado].

Scutellum, anterior half of pronotum, and head excepting apex of tylus black. Coloration otherwise and form as in typical variety.

Geocoris bullatus var. **borealis** Dallas.

Ophthalmicus borealis Dallas, *Hemipterous Insects . . . of the British Museum*. II, 1852, p. 585. [North America.]

Geocoris borealis Distant, *Biologia Centrali-Americana Heteroptera* I, 1882, p. 199. [Volcan de Agua, Guatemala.]

Distant says (loc. cit.): "All the Central American specimens . . . are constant in character and of the form described by Mr. Dallas, of which I have examined the type." Distant's figure (Plate 18, fig. 17) shows the corium to be chiefly fuscous, a point not mentioned in the original description, but which characterizes a giant race of *Geocoris bullatus* found in the north and in high mountains farther south. This distribution indicates that *borealis* is entitled to subspecific rank, but settling of this point may well await further accumulation of material.

The use of the term *borealis* for this race rests chiefly on Mr. Distant's action subsequent to examination of the type. The original description is very like that of *griseus* Dallas, which is placed as a synonym of *bullatus*. Should *griseus* and *borealis* prove to be the same thing, as seems likely from the original descriptions, the former has precedence.

The single specimen in the U. S. National Museum is from Ungava Bay, Labrador. Length 4.5 mm.

Geocoris decoratus Uhler.

Geocoris decoratus Uhler, Report upon the insects collected by P. R. Uhler during the explorations of 1875, including monographs of the families Cydnidae and Saldae, and the Hemiptera collected by A. S. Packard, Jr., M. D., Bul. U. S. Geol. and Geogr. Survey of the Territories, Vol. III, No. 2, 1877, pp. 410-411. [Clear Creek Canon, Colorado.]

No unequivocal structural character could be found to separate *decoratus* from *bullatus*. Everything seems to intergrade. Yet *decoratus* looked at in mass is a different thing from *bullatus*. It is longer proportionally,

the scutellum always being notably longer than wide at base. The sides of the body are noticeably more nearly parallel than in *bullatus*. The ground color is more yellowish, and the surface more polished, this being especially noticeable in the hemelytra.

The varieties may be separated as follows:

- a. Scutellum almost wholly black; a wedge-shaped area, consisting of scutellum and parts anterior included in a triangle with scutellum at apex, largely piceous. *decoratus* var. *decoratus* Uhler.
- aa. Scutellum with obvious yellow vittae; pronotum with two longitudinal bands of dark color, one on each side of middle, these tending to disappear. *decoratus* var. *solutus* Montandon.

***Geocoris decoratus* var. *decoratus* Uhler.**

The typical variety is strikingly colored, the piceous wedge covering head, most of pronotum and scutellum contrasting strongly with the clear margins of pronotum and the almost wholly pale hemelytra. The piceous color is sometimes much diluted on pronotum, but specimens in which the outlines of the wedge shaped marking are preserved are classed with *decoratus*. Scutellum sometimes with two yellow spots. Length 3 to 4 mm. Range: From Kansas to British Columbia, California and Texas.

Geocoris lividipennis Stal. Hemiptera Mexicana, Entomologische Zeitung (Stettin), 23, Nos. 7-9, July-Sept., 1862, p. 311. [Mexico.]

The figure of the type of this species given by Distant* represents the scutellum of *lividipennis* as being longer than wide. The species therefore belongs in the *bullatus-decoratus* group. The color characters, so far as the figure shows, pertain either to *G. decoratus* or to *G. bullatus* var. *obscuratus*. The name *lividipennis* would preoccupy either of these designations, but examination of the type is necessary before any change can intelligently be made.

***Geocoris decoratus* var. *solutus* Montandon.**

Geocoris decoratus var. *solutus* Montandon, Bul. Soc. Sci. Bucarest, XVI, Nos. 5-6, Sept.-Dec., 1907, pp. 223-224.

When the spots on scutellum are enlarged so as to deserve the name vittae, the dark color on pronotum usually becomes broken up into two more or less definite bands, one on each side of the middle, running from posterior border to the dark band in region of callosities. The tendency to paleness is sometimes carried to such an extreme that there remain only traces of the bands in the form of dusky spots on hind margin of pronotum and ring-like traces about callosities. The base and middle line of scutellum usually retain their dark color. Length 3 to 4 mm. Range: From Kansas and Colorado to California and Texas.

Geocoris pallens Stal (Öfv. Kgl. Vet. Akad. Forh. 11, No. 8, 1854, p. 236; Kgl. Svenska Fregatten Eugénies Resa Zool. I, 1859, p. 250; Enum. Hemip. 4, Kgl. Vet. Akad. Handl. Bd. 12, No. 1, 1874, p. 136 [Cali-

* Biologia Centrali-Americana, Hemiptera-Heteroptera, I, 1882, Pl. 17. fig. 27.

ornia]) probably is the same as *G. decoratus* var. *solutus*. If this be true the name of the species will stand as *Geocoris pallens* Stal, and what is here called *G. decoratus* Uhler will have to assume a varietal name, either *lividipennis* Stal or *decoratus* Uhler according to the result of clearing up the confusion between those two names. These changes should not be made, however, unless examination of Stal's material confirms the above suggestions.

Geocoris scudderi Stal.

Geocoris scudderi Stal, Enum Hemip. 4, 1874, p. 135 [Texas].

Head as described in key, thorax distinctly narrowed in front, anterior angles almost evenly rounded, closely and strongly punctate except callosities, more or less obvious median line, and posterior angles; scutellum strongly but not densely punctate, median line smooth, slightly elevated.

Color: Eyes reddish, head, apical joint of antenna, beak and legs testaceous; other antennal joints and sometimes those of beak marked with fuscous; pronotum, scutellum and corium shining piceous, the former sometimes testaceous on hind margin; narrow reflexed edge of corium somewhat lighter in color; membrane clear light brown. Length 3.3 mm. Two males, Victoria, Texas, May 15, 1908, on herbage.

Geocoris carinatus new species.

Scutellum equilateral, smoothly low convex, closely and evenly punctured, except for a slightly elevated smooth line traversing posterior two-thirds; head granular with median sulcus interrupted by a knob at base of tylus, sulcus faint above this point; pronotum very transverse, slightly narrowed in front, anterior angles almost evenly rounded, median smooth line practically percurrent, well defined and slightly elevated; pronotum closely dark punctured except posterior angles, corium with two rows of closely set punctures near clavus, and one near costal margin, posterior third of corium sparsely punctate, even on disk; form broadest at eyes, thorax broad, sides of hemelytra converging rapidly, the insect thus having a particularly big headed, broad-shouldered aspect.

Head piceous, tylus and spot about base of beak whitish, front half of pronotum piceous except testaceous spot at middle of anterior border; posterior half chiefly testaceous, a diffuse fuscous blotch on each side near hind margin; scutellum piceous, corium testaceous, infuscate near internal angle and posterior margin; membrane hyaline; underside piceous, coxal spots, ostiolar canals and front margin of prostethium whitish; legs testaceous. Length, 2.8 mm. One male, Los Angeles, California. Type in collection of U. S. National Museum.

Geocoris atricolor Montandon.

Geocoris atricolor Montandon. Bul. Soc. Sci. Bucarest XVI, Nos. 5-6, Sept.-Dec. 1907, pp. 228-229 [Utah, Colorado, Texas].

Shining piceous, usually with a steely bluish cast; coxae, ends of femora,

more or less of distal parts of tibiae and tarsi, light brown; hemelytra usually with no more than a trace of fuscous edging, but sometimes with broad testaceous margins, being fuscous only on disk. Length 3.5 to 4 mm. Range: Colorado to Washington and California.

May intergrade with *G. uliginosus* Say.

***Geocoris uliginosus* Say.**

Salda uliginosa Say. Hemiptera of North America, Dec. 1831, p. 18.

Complete writings, 1, 1859, p. 337 [United States].

Ophthalmicus niger Dallas, Hemipterous Insects . . . of the British Museum, II, 1852, p. 586. [North America.]

This species includes a number of color varieties which may be separated by the following key.

- a. Head piceous.
 - b. Pronotum piceous, sometimes with traces of lighter color along sides.
 - c. Outer margins of hemelytra narrowly margined with fuscous, testaceous or white, or with narrow translucent edge.

uliginosus var. *uliginosus* Say.
 - cc. Hemelytra broadly margined with white or whitish.

uliginosus var. *lateralis* Fieber.
 - bb. Pronotum more or less broadly margined with testaceous or lighter color.

Pronotum and hemelytra broadly margined with testaceous or whitish. Hemelytra sometimes entirely pale.
uliginosus var. *speculator* Montandon.
- aa. Head light reddish brown or testaceous.

Pronotum and hemelytra broadly margined with testaceous or lighter color. Hemelytra sometimes entirely pale.
uliginosus var. *limbatus* Stal.

***Geocoris uliginosus* var. *uliginosus* Say. Loc. cit.**

Length 3 to 4 mm. Range: From New York to Washington, California, Texas and Florida.

***Geocoris uliginosus* var. *lateralis* Fieber.**

Ophthalmicus lateralis Fieber, Wiener Ent. Monats. V, 1861, p. 271 [Pennsylvania].

Length 3 to 4 mm. Additional to type locality: Missouri.

***Geocoris uliginosus* var. *speculator* Montandon.**

Geocoris uliginosus var. *speculator* Montandon, Bul. Soc. Sci. Bucarest, XVI, Nos. 5-6, Sep.-Dec., 1907, pp. 227-228 [St. Louis, Mo.; Lowell, Mass.; Buffalo, N. Y.; British Columbia].

Geocoris howardi Montandon, Ibid. pp. 229-231. [Marquette, Michigan.]

Length 3.25 to 4 mm. Range: Massachusetts to British Columbia, California, and Texas.

***Geocoris uliginosus* var. *limbatus* Stal.**

Geocoris limbatus Stal. Enum. Hemip. 4, 1874, p. 136. [New Jersey, Illinois.]

Length 3 to 4 mm. Range: Massachusetts and New York to Illinois.

All specimens seen are more or less brachypterous, thus having a more oval appearance than is usual in the species.



McAtee, W. L. 1914. "Key to the nearctic genera and species of Geocorinae (Heteroptera; Lygaeidae)." *Proceedings of the Biological Society of Washington* 27, 125–136.

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