

C H E C K L I S T

of the

C I C A D E L L I D A E (H O M O P T E R A)

of

A M E R I C A , N O R T H O F M E X I C O

by

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PREFACE

The most recent list of North American Cicadellidae which has been published was contained in the VanDuzee Catalogue which appeared in November, 1917. This indispensable volume is an excellent piece of work and has served as the standard reference text for all workers in the Hemiptera for the past twenty years. During this period of time a large number of both species and genera have been described. The proportional increase is indicated by the fact that the VanDuzee Catalogue contained some 69 genera and 700 species of Cicadellidae. The present list includes some 145 genera and more than 1800 species. This large increase in species has rendered the VanDuzee Catalogue inadequate for present work and the following list has been prepared to serve as a supplement to the Catalogue. An attempt has been made to list all the described species and genera to September, 1937. Synonymy of the VanDuzee Catalogue has not been repeated in this list but recent synonymy has been indicated as far as possible by indenting and underlining the name placed in synonymy. In spite of the fact that errors and omissions will undoubtedly occur the list is being published in its present form in the hope that it will be of use especially to many workers in the Homoptera and will serve as a reference work for many others.

Frequently a reference to the original description is desirable and as a consequence the authors have deemed it advisable to include such a reference in concise form after the name of each species. The publications are cited by number in order to save repetition in wording in names of Journals, Proceedings, and similar publications. The first

number in the bibliography citation refers to the name of the publication, an alphabetically arranged list of which are serially numbered and placed at the rear of the list of species. This number is followed in sequence by the number of the volume, occasionally the number of the issue in parenthesis, the page number, and the year when published. A colon is used between the volume and page numbers. For example, the reference 4- 25:789, 1932, indicates the species was described in the Annals of the Entomological Society of America, volume 25, page 789 in the year 1932.

Often it is desirable to refer to the generic treatment as well as the original description of a species. In view of this fact a list of many of the more recent generic papers have been cited, arranged according to the sequence of genera in the species list.

A small list of omitted and recently described species are appended at the end of the list including species in the genera Osbornellus, Hebecephalus, and Jassus.

Several have assisted in collecting and checking data and grateful appreciation is hereby acknowledged to all who have helped in this way.

The Authors

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circellata (Bak.) Ariz., Calif. 90- 8:235, 1898.

dohrnii (Sign.) Ariz. 5- ser. 3, 3:792, 1855.

occatoria (Say). N.C., Fla., Miss., Tenn., Mo., Tex. 50- 6:311, 1831.

monticola Fowl. Ariz. 6- 2:244, 1899.

mollicula Fowl. Ariz. 6- 2:288, 1899.

luculenta Fowl. Ariz. 6- 2:234, 1899.

multilineata Fowl. Ariz. 6- 2:241, 1899.

huachucana Ball. Ariz. 80- 49:19, 1936.

taosa Ball. N. Mex. 80- 49:20, 1936.

cucurbita Ball. Ariz. 80- 49:20, 1936.

curta Beam. N. Mex. 53- 10:13, 1937.

KOLLA Dist. 20- 4:233, 1908

bifida (Say). Eastern and Mo., Kans., Neb. 50- 6:313, 1831.

geometrica (Sign.) D.C., Fla., Ohio, Ky., Tenn., Ill., Mo., Ark., Ia.
5- ser. 3, 2:12, 1854.

var. plutoniella Ball. Fla. 80- 49:22, 1936.

hartii (Ball). Pa., Fla., Miss., Ohio, Ill., Tenn., Mo., Tex., N. Mex.
85- 8:61, 1901.

sidana Ball. Ariz. 80- 49:21, 1936.

similis (Walk.) Fla., W. Ind., Mex. 119- 3:769, 1851.

HELOCHARA Fh. 37- p. 56, 1851

communis Fh. Eastern and Tex., Colo., N. Mex., Ariz., Calif. 37- p. 56,
1851.

GRAPHACEPHALA V. D. 12- 3:22, 1877

coccinea (Forst.) Eastern and Mo., Kans., Okl., Tex. 40- p. 69, 1771.

versuta (Say). Southern and Mo., Tex. 50- 6:311, 1831.

ignava Ball. Ariz. 80- 49:22, 1936.

cythura (Bak.) Ariz., Calif. 90- 8:263, 1893.

DRAECULACEPHALA Ball. 85- 3:66, 1901

paludosa Ball & China. (previously known as angulifera) Que. Ont., Me.
N.Y., Pa., Ohio, Ia., Kans., Colo., Utah, Br. Col.,
Wash. 53- 6:3, 1933.

antica Walk. Eastern U.S. 119- 3:771, 1851.

portola Ball. Fla. 39- 2:35, 1927.

producta (Walk.) Fla. 119- 3:772, 1851.

acuta (Walk.) 119- 3:773, 1851.

mollipes (Say). Eastern and Mo., Kans., Colo., Ariz., N. Mex., Calif.,
Br. Col. 50- 6:312, 1831.

minerva Ball. Southwestern U.S. 39- 11:36, 1927.

bradleyi V. D. Ga. 28- 26:173, 180, 1915.

inscripta V. D. Ga., Tenn., Ohio, Ill. 28- 26:178, 180, 1915.

pagoda Ball. Fla. 39- 11:37, 1927.

lenticula Ball. Mex. and Cen. Amer. 39- 11:38, 1927.

balli V. D. Ga., Fla., Miss. 28- 26:177, 1915.

7-guttata (Walk.) N.C., Ga., Fla., Miss. 119- 3:773, 1851.

angulifera (Walk.) Ont., Man., Colo. 119- 3:771, 1851.

manitobiana Ball. 85- 8:70, 1901.

crassicornis V. D. Calif., Ore., Wash., Utah, Colo. 28- 26:178, 181, 1915.

prasina (Walk.) Northeast coast to west coast. 119- 3:768, 1851.

noveboracensis Fh. 37- p. 56, 1851.

minor (Walk.) Fla., Colo., Calif., Wash. 119- 3:772, 1851.

CARNEOCEPHALA Ball. 39- 11:39, 1927

floridana (Ball). Fla., Ga., Tex. 85- 8:72, 1901.

fulgida Nott. Calif. 53- 5:101, 1932.

flaviceps (Riley). S.C., Ga., Fla., Ala., Miss., La., Va., Ky., Ariz., Tex.
Neb., Calif., N.Mex., Ark., Okla., Kans., Tenn., Mo.,
Wis. 122- 3:78, 1880.

dyeri (Gib.) Hond. and Guata. 30- 32:25, 1919.

gillettei (Ball). Colo. 85- 8:72, 1901.

nuda Nott. Ariz. and Mex. 53- 5:107, 1932.

triguttata Nott. Calif. 53- 5:108, 1932.

reticulata (Sign.) Cuba, Isl. Pines, Jam. Haiti, C. Z. 5- ser. 3, 2:22,
1854.

sagittifera (Uhl.) Tex., Calif., Colo., W. Ind. Trin. P. R. 88- p. 76,
1895.

PAGARONIA Ball. 16- 34:19, 1902

13 punctata Ball. Calif. 16- 34:20, 1902.

tripunctata Fh. Eastern and Mo. 37- p. 55, 1851.

EVACANTHUS Lep. & Serv. 24- 10:612, 1825

acuminatus (Fabr.) Northeastern and Ia., Wash., Vanc. Isl. 30- 4:36, 1794.

interruptus (Linn.) N.C., S.C. 60- 1:438, 1758.

BATHYSMATOPHORUS Sahlb. 97- p. 109, 1871

uhleri Bak. Calif. 90- 8:260, 1898.

ERRHOMENELLUS Put. 91- p. 79, 1886

- montanus Bak. Colo. 90- 8:262, 1898.
lineatus Bak. Wash. 90- 8:261, 1898.
oregonensis Bak. Ore. 90- 8:262, 1898.
friscanus Ball. Calif. 16- 41:182, 1909.
irroratus Ball. Calif. 16- 34:18, 1902.
maculatus (G. & B.) Colo., Calif. 17- p. 83, 1895.
aridus Ball. Nev. 16- 41:183, 1909.

Subfamily GYPONINAE (Stal.) 59- 27:736, 1870

PENTHIMIA Germ. 62- 4:46, 1821

- americana Fh. Eastern, Minn., Dak., Mont., Colo. 37- p. 57, 1851.
floridana Law. Fla. 53- 6:34, 1933.

DRAGONANA B. & R. 4- 20:489, 1927.

- dracontea Gib. Ariz. 86- 56:100, 1919.

GYPONANA Ball. 4- 13:84, 1920

- octolineata (Say). U.S. throughout. 98- 2:257, 1824.
cana (Burm.) Throughout U.S. 15- 1: no. 10, 1838.
striata (Burm.) Northern U.S., Can., Pacific Coast. 15- 1: no. 9, 1838.

flavilineata (Fh.) 37- p. 57, 1851.

quebecensis (Prov.) 66- 4:352, 1872.

scrupulosa (Spangb.) 101- p. 9, 1878.

olivacea (Spangb.) 29- 1:24, 1861.

geminata (Osborne) 95- p. 513, 1905.

- pruinosa (Spangb.) Ga., Tex. 101- p. 9, 1878.
tenella (Spangb.) Eastern U.S., Colo., Utah, Calif. 101- p. 34, 1878.
chadana Ball & R. Utah. 4- 20:493, 1927.
ampliata Ball. Ariz. 55- 25:498, 1935.
pullata Ball. Ariz. 55- 25:499, 1935.

- ramosa (Kirk.) Ariz. 46- 4:60, 1907.
- turbinella Ball. Ariz., Utah. 55- 25:499, 1935.
- rugosa (Spangb.) Eastern, Colo., Ariz. 101- p. 6, 1878.
- delicata (Fowl.) 6- 2:297, 1903.
- elongata Ball. Calif. 55- 25:500, 1935.
- annulicornis (V. D.) Lower Calif. 82- 12:176, 1923.
- delta Ball. Ariz. 55- 25:500, 1935.
- var. alomogorda Ball. N. Mex. 55- 25:501, 1935.
- dorsalis (Sign.) Southwestern U.S. 5- 3rd ser. 1:349, 1853.
- GYPONA Germ. 62- 4:73, 1821.
- melanota Spangb. N.Y. to Kans. & Colo. 101- p. 19, 1878.
- bipunctulata Woodw. 12- 3:30, 1887.
- nigra Woodw. 12- 3:31, 1887.
- bimaculata Gibs. 86- 56:93, 1919.
- unicolor Gibs. 86- 56:93, 1919.
- viliior Fowl. Ariz. 6- 2:301, 1903.
- verticalis Stal. Colo., N. Mex., Ariz. 105- 25:84, 1864.
- mexicana Spangb. 101- p. 13, 1878.
- bimaculata Spangb. 101- p. 23, 1878.
- mixabunda Gib. 86- 56:92, 1919.
- germari Stal. 105- 25:84, 1864.
- signoreti Stal. Utah. 105- 25:83, 1864.
- var. pilula Ball & R. Utah, Ariz. 4- 20:494, 1927.
- unicolor Stal. Colo., Ariz., and Mex. 105- 25:84, 1864.
- angulata Spangb. Colo., Br. Col., to Mex. 101- p. 32, 1878.
- germari Fowl. 6- 2:296, 1903.
- PRAIRIANA Ball. 4- 13:90, 1920
- cinerea (Uhl.) Mont., Colo., Dak., Kans., Ia., Ill. 14- 5:460, 1877.
- ponderosa Ball. Colo. 4- 13:91, 1920.

- kansana Ball. Kans., Colo., Ia. 4- 13:91, 1920.
- moneta (V. D.) Calif., Nev., Ariz. 82- 12:174, 1923.
- orizaba Ball & R. Mex. 4- 20:496, 1927.
- subta Ball. Colo. 4- 13:92, 1920.
- sidana Ball. Ariz. 55- 25:501, 1935.
- milaris (Stal.) Atlantic & Gulf Coast, Conn. to Tex. 105- 25:83, 1864.
- fraterna (Spangb.) 101- p. 72, 1878.
- negotiosa (Gibs.) 86- 56:97, 1919.
- fraudulenta (Spangb.) Md., Mex. 29- p. 108, 1883.
- marmorata (Fowl.) 6- 2:306, 1903.
- POHANA Ball. 4- 13:93, 1920
- scarlatina (Fh.) 37- p. 57, 1851.
- modesta (Spangb.) 29- 4:107, 1883.
- limbatipennis (Spangb.) Ia., Wis., N.Y. 101- p. 47, 1878.
- albimarginata (Woodw.) 12- 3:31, 1887.
- pectoralis (Spangb.) Upper Miss. Valley to N. E. States. 101- p. 46, 1878.
- hullensis (Prov.) 89- 3:269, 1889.
- bimaculata (Wood.) 12- 3:32, 1887.
- woodworthi (V.D.) 16- 46:389, 1915.
- spadix (DeL.) Tenn., N.J., D.C. 69- 13:235, 1918.
- rodora Ball. 4- 13:96, 1920.
- pauperata (Spangb.) 29- p. 33, 1881.
- puncticollis (Spangb.) Southern and Kans., Ont., N.Y. 101- p. 54, 1878.
- quadrinotata (Spangb.) 101- p. 56, 1878.
- albosignata (Uhl.) 88- p. 74, 1895.
- proscripta (Fowl.) 6- 2:309, 1903.
- hieroglyphica (Fowl.) 6- 2:312, 1903.
- notula (Fowl.) 6- 2:313, 1903.

- vinula (Stal.) Va. & Fla. to Mex. 105- 25:81, 1864.
- exornata (Fowl.) 6- 2:315, 1903.
- proprior (Fowl.) 6- 2:311, 1903.
- tergata (Fowl.) 6- 2:312, 1903.
- citrina (Spangb.) Fla., Tex. 101- p. 45, 1878.
- meditabunda (Spangb.) Tex. 101- p. 39, 1878.
- cacozela (Gib.) 86- 56:94, 1919.
- occlusa (Gib.) 86- 56:94, 1919.
- dohrni (Stal.) Colo., Ariz. 105- 25:82, 1864.
- bisignata (Fowl.) 6- 2:313, 1903.
- reservanda (Fowl.) 6- 2:313, 1903.
- aquila (Gib.) 86- 56:99, 1919.
- sanguinolenta (Spangb.) Tex., Ga., Pa., Mass. 101- p. 63, 1878.
- irrorella (Spangb.) Tex., Atlantic Coast to Mass. 101- p. 63, 1878.
- scarlatina (Gib.) 86- 56:96, 1919.
- grisea (Gib.) 86- 56:97, 1919.
- grisea (Spangb.) South & southwest. 101- p. 63, 1878.
- bipunctulata (Gib.) 86- 56:98, 1919.
- celata (Fowl.) 6- 2:316, 1903.
- limonea Ball. Ohio, D.C. 4- 20:489, 1927.
- sonora Ball. Ariz. 55- 25:502, 1935.
- curiata (Gib.) Ariz. 86- 56:97, 1919.
- dorsalis (Spangb.) N. Mex., Ariz. 101- p. 30, 1878.
- dictitoria (Gib.) 86- 56, 91, 1919.
- marginifrons (Fowl.) Colo., Ariz., N. Mex., Mex. 6- 2:502, 1909.
- var. suilla Ball. Ariz. 55- 25:503, 1935.
- resima (Fowl.) Ga., Fla., Mex. 6- 2:316, 1903.
- candida (V. D.) Ariz., Calif. 82- 12:175, 1923.

XEROPHLOEA Germ. 121- 1:190, 1839

- zionis Law. Utah. 74- 7:161, 1931.
- vanduzeei Law. Calif. 74- 7:161, 1931.
- obtusa Law. Calif. 74- 7:162, 1931.
- minor Law. Tex., Ia., Miss., Fla., Ark. 74- 7:162, 1931.
- californica Law. Calif. 74- 7:163, 1931.
- brunnea Law. Calif. 74- 7:163, 1931.
- robusta Law. Tex., N. Mex., Ariz. 74- 7:164, 1931.
- inflata Law. Tex., Ariz., Calif. 74- 7:164, 1931.
- majesta Law. Kans., Tex., Miss., S.C. 74- 7:165, 1931.
- oracilis Law. Ariz. 74- 7:165, 1931.
- tenuata Law. Calif. 74- 7:165, 1931.
- viridis (Fabr.) Eastern & Kans., Utah, Colo., Tex., Calif., Wash., Ore.,
Mont., Ariz., N. Mex. 30- 4:50, 1794.
- major Bak. N.Y., N.J., Va., Tenn., Kans. 90- 8:285, 1898.

Subfamily JASSINAE (A. & S.) 2- p. 581, 1843

STROGGYLOCEPHALUS Flor. 38- 2:210, 1861

- agrestes (Fall.) N.H., Conn., N.Y., Mich., Ia., Colo. 1- 27:23, 1806.

ACUCEPHALUS Germ. 100- 1:181, 1833.

- nervosus (Schrank). Ont., Me., N.Y. 99- p. 252, 1781.
- fusco-fasciatus (Goeze). N.J. 43- 2:161, 1778.
- flavostrigatus (Donov.) Vt., N.Y. 21- 3:28, 1799.
- albifrons (Linn.) Ont., Me., N.H., N.Y., Pa., D.C., Mich., Wis. 60-
1:437, 1758.
- placidus (Prov.) Que. 89- 3:280, 1889.
- giffardi, V. D. Calif. 82- 7:293, 1917.

MEMNONIA Ball. 94- p. 66, 1900

- simplex V. D. Calif. 82- 7:294, 1917.
- consobrina Ball. Neb., Colo. 94- p. 66, 1900.
- albolinea Ball. Ariz. 80- 50:131, 1937.

fossitia Ball. Ariz., N. Mex. 80- 50:132, 1937.

fraterna Ball. Neb., Colo. 94- p. 67, 1900.

XESTOCEPHALUS V. D. 109- 19:298, 1892

tessellatus V.D. Pa., N.C., Fla., Miss., Tenn., Mo., Kans. 10- 5:216, 1894.

robustus Peters. Fla. 53- 6:74, 1933.

trimaculatus Peters. La. 53- 6:75, 1933.

lunatus Peters. Fla. 53- 6:76, 1933.

coronatus Osb. & Ball. Ia., Wis., Neb. 85- 4:184, 1897.

pulicarius V.D. Eastern and Mo., Kans., Ia., Utah. 10- 5:215, 1894.

similis Peters. Kans. 53- 6:77, 1933.

piceus Osb. Ohio. 68- 3:244, 1928.

brunneus V.D. Mass., R.I., N.Y., Pa. 10- 8:62, 1907.

nigrifrons Osb. Me., Tenn. 63- 233:109, 1915.

fulvifrons Peters. Tex. 53- 6:78, 1933.

superbus (Prov.) Que., Ont., Me., N.Y., Pa., Ohio, Tenn. 89- 3:339, 1890.

IONIA Ball. 9- 28:224, 1933

triunata Ball. Ariz. 9- 28:225, 1933.

NIONIA Ball. 80- 28:165, 1915.

palmeri (V.D.) Southeastern U.S. 16- 23:171, 1891.

DORYCEPHALUS Kirsch. 47- 4:102, 1866

platyrhynchus Osb. Ia., Neb., Kans., Colo. 16- 26:216, 1894.

vanduzei Osb. & Ball. Fla., Neb., Kans., Colo. 83- 7:74, 1898.

knulli S. & DeL. Fla. 84- 25:151, 1923.

omani Beam. Ore. 53- 9:31, 1936.

NEOSLOSSONIA V. D. 10- 9:218, 1909

putnami (Osb.) Ga., Fla. 83- 10:163, 1907.

HECALUS Stal. 5- ser. 4, 4:65, 1864

apicalis V.D. Fla. 10- 9:217, 1909.

bracteatus Ball. Colo., Ariz. 16- 33:4, 1901.

- balli Beam. Ariz. 53- 10:12, 1937.
- lineatus (Uhl.) N.Y., N.J., Mo., Kans., Ia., Neb., Minn., S.D., N.D.,
Colo. 14- 3:463, 1877.
- SPANGBERGIELLA Sign. 5- ser. 5, 9:273, 1879
- vulnerata (Uhl.) Tex., Tenn., Fla., S.C., N.C., Va., N.J., N.Y., Ark.,
Kans., La., Miss., Md. 14- 3:464, 1877.
- var. lativittata Law. Ark. 53- 5:113, 1932.
- var. convexa Law. Fla. 53- 5:113, 1932.
- mexicana Bak. Mex., Ariz. 16- 29:157, 1897.
- quadripunctata Law. S.C., D.C., Kans., Ark., Miss., La., Tenn., Ala.,
Ill., Tex., Va., Fla. 53- 5:120, 1932.
- PARABOLOCRATUS Fieb. 117- 16:502, 513, 1866
- attenuatus Shaw. Ariz. 53- 5:40, 1932.
- var. purpureus Ball. Ariz. 9- 28:223, 1933.
- curtus Shaw. Kans. 53- 5:41, 1932.
- viridis (Uhl.) Conn & Mass. to Wash. & Ore. 14- 3:462, 1877.
- var. montanus Ball. Colo. 94- p. 71, 1900.
- grandis Shaw. Kans., Tex., Ala., Fla. 53- 5:44, 1932.
- nimbosus Ball. Ariz. 80- 50:129, 1937.
- conus Shaw. N. Mex. 53- 5:45, 1932.
- major Osb. Me., Mich., Wis., Colo., Mass., Ind., Can. 63- 238:110, 1915.
- flavidus Sign. S. E. states and Kans, Ark. 5- ser. 5, 9:276, 1879.
- kansiensis Shaw. Kans., Mo., Minn. 53- 5:47, 1932.
- planus Shaw. Calif. 53- 5:48, 1932.
- spadix Ball. Ariz., N. Mex. 80- 50:130, 1937.
- fenestrellus Ball. Ariz., Calif. 80- 50:130, 1937.
- brunneus Ball. Colo., Neb., N. Mex., Kans. 94- p. 71, 1900.
- atascaderus Ball. Calif. 9- 28:223, 1933.

DORYDIELLA Bak. 16- 29:159, 1897

floridana Bak. Mass., Fla., Pa., Ill. 16- 29:159, 1897.

DICYPHONIA Ball. 94- p. 69, 1900

ornata Bak. Kans., Neb., Colo. 16- 32:49, 1900.

ramentosa Ball. Neb., Colo. 94- p. 69, 1900.

conica Shaw. N. Mex. 53- 5:45, 1932.

nigrita Ball. Mex. 80- 50:132, 1937.

plura Beam. Ariz. 53- 9:68, 1936.

plana Beam. Ariz. 53- 9:69, 1936.

minuta Beam. Ariz. 53- 9:70, 1936

COCHLORHINUS Uhl. 11- 1:358, 1876

pluto Uhl. Calif. 11- 1:358, 1876.

UHLERELLA Ball. 16- 34:54, 1902

coquilletti (V.D.) Calif. 25- 6:95, 1890.

ziczac Ball. Calif. 80- 28:166, 1915.

stygica Ball. Calif. 16- 34:55, 1902.

pasadena Ball. Calif. 80- 28:166, 1915.

signata Ball. Calif. 16- 34:56, 1902.

DRIONIA Ball. 80- 28:167, 1915

nigra Ball. Ore. 80- 28:167, 1915.

HULERIA Ball. 16- 34:57, 1902

4 punctata Ball. Calif. 16- 34:58, 1902

PENEHULERIA Beam. 74- 10:43, 1934

acuticephala Beam. Calif. 74- 10:43, 1934.

ALIGIA Ball. 83- 12:31, 53, 75, 1907

inscripta (V.D.) Calif. 25- 6:92, 1890.

californica V.D. Calif., Ore. 82- 14:411, 1925.

colei V.D. Calif. 82- 14:412, 1925.

descripta Ball. Ariz. 74- 7:119, 1931.

- plena V.D. Costa Rica. 82- 21:37, 1933
- jucunda (Uhl.) Md., Colo., N. Mex., Tex., Ariz., Utah, Calif. 14- 3:469,
1877.
- munda (Ball). N. Mex., Ariz. 16- 33:48, 1901.
- oculea (Ball). Colo. 16- 33:50, 1901.
- modesta (Osborne & Ball). Pa., D.C., N.C., Ia. 83- 7:98, 1898.
- occidentalis V.D. Calif. 82- 14:413, 1925.
- manitou (Ball). Colo., N. Mex. 16- 33:49, 1901.
- var. dellana Ball. Ariz. 74- 7:120, 1931.
- turbinata Ball. Ariz. 74- 7:120, 1931.
- chiricana Ball. Ariz. 74- 7:121, 1931.
- santana Ball. Ariz. 74- 7:121, 1931.
- amoena V. D. Lower Calif. 82- 12:176, 1923.
- MESAMIA Ball. 83- 12:31, 59, 75, 1907
- nigridorsum Ball. Eastern and Ia., Dak., Kans., Colo., Utah. 83- 12:60,
1907.
- straminea (Osborne) Ia., Dak., Neb., Kans., Colo., Utah., Calif. 85- 5:241,
1898.
- var. dolosa Ball. Colo. 9- 26:91, 1931.
- tarbela Ball. Ariz. 9- 26:91, 1931.
- prescotia Ball. Ariz. 9- 26:92, 1931.
- orizaba Ball. Mex. 9- 26:92, 1931.
- diana V. D. Calif. 82- 14:410, 1925.
- visalia Ball. Calif. 16- 48:128, 1916.
- coloradensis (G. & B.) Colo., Utah, Calif. 17- p. 91, 1895.
- ludoviciana Ball. Wis. 9- 26:93, 1931.
- illumina Ball. Ariz. 16- 41:80, 1909.
- irrorella (Stal.) Calif. 58- p. 295, 1859.
- pagana V. D. Utah. 82- 14:409, 1925.

BANDAKA Ball. 9- 26:93, 1931

johnsoni (V.D.) Eastern and Ia. 16- 26:137, 1894.

fenestrata (Ball). 16- 34:12, 1902. (Mexico)

animana (Ball). Colo. 16- 41:81, 1909.

aurata (Ball). D. C., Ohio, Pa. 16- 41:81, 1909.

TWININGIA Ball. 9- 26:93, 1931

blandus (Ball). Calif., Colo. 16- 33:7, 1901.

pellucidus (Ball). Calif. 16- 41:83, 1909.

irroratus (Osborne) 70- 11:257, 1910.

magnata Ball. Ariz. 9- 26:94, 1931.

malvastra Ball. Ariz. 9- 26:94, 1931.

solitaria Ball. Ariz. 9- 31:18, 1936.

fumidus (Ball). Colo., Ariz. 16- 33:8, 1901.

bicolor (Ball). Calif. 28- 20:166, 1909.

catalinus (Ball). Ariz. 16- 41:82, 1909.

scrupulosus (Ball). Calif. 16- 34:14, 1902.

SANCTANUS Ball. 55- 22:10, 1932

sanctus (Say) N.J., N.C., Ohio, Ky., Tenn., Ind., Ia., Ill., Mo.
50- 6:307, 1831.

picturatus (Osborne) 85- 5:243, 1898.

discalis (V.D.) Chatham Isl. 82- 21:31, 1933.

fasciatus (Osborne) N.J., Fla., Miss., Tex. 51- 19:190, 1900.

neglectus (Osborne) 70- 11:252, 1910.

tectus Oman. Va., S.C. 84- 36:75, 1934.

cruciatus (Osborne) N.Y., N.J., Fla. 70- 11:253, 1910.

orbiculatus (Ball). Ariz. 55- 22:11, 1932.

aestuarius (DeL. & S.) N.C. 4- 22:101, 1929.

limicolus (Osborne) Fla. 39- 6:17, 1922.

eburneus (DeL.) Miss. 54- 32:63, 1924.

fusconotatus (Osborne) La. 39- 6:17, 1922.

SCAPHOIDEUS Uhl. 111- 1:33, 1889

- productus Osb. Ia. 51- 19:200, 1900.
- merus DeL. & B. Pa. 69- 36:336, 1936.
- chelus DeL. & B. Ill. 69- 36:339, 1936.
- transeus DeL. & B. Ill., Ia., D.C. 69- 36:339, 1936.
- major Osb. Ia. 51- 19:205, 1900.
- torqus DeL. & B. Pa. 69- 36:337, 1936.
- elongatus DeL. & B. Pa., D.C., Va., Miss., Ill. 69- 36:337, 1936.
- densus DeL. & B. Ill., Ohio, Que. 69- 36:340, 1936.
- cylindratus DeL. & B. Pa., Me., N.Y., Ill. 69- 36:338, 1936.
- carinatus Osb. Eastern U.S. 51- 19:201, 1900.
- angustatus DeL. & B. Pa. 69- 36:335, 1936.
- frisoni DeL. & M. Wis., N.Y., Pa., Md., Me. 107- 17:975, 1936.
- veterator DeL. & B. Pa. 69- 36:334, 1936.
- bifurcatus DeL. & M. Pa. 107- 17:974, 1936.
- immistus (Say). Eastern and Ia., Mo., Kans., Colo., Tex., Calif. 50-
6:306, 1831.
- dilatatus DeL. & M. Pa. 107- 17:966, 1936.
- crassus DeL. & M. N.J. 107- 17:966, 1936.
- curvatus DeL. & M. Ill. 107- 17:967, 1936.
- camurus DeL. & M. Pa., Ill. 107- 17:967, 1936.
- flexus DeL. & M. Pa., Tenn., Ill. 107- 17:968, 1936.
- radix DeL. & M. Ill. 107- 17:969, 1936.
- diutius DeL. & M. Pa., Ill. 107- 17:972, 1936.
- amplus DeL. & M. Pa. 107- 17:973, 1936.
- incisus Osb. Ohio, Ia., Ill. 51- 19:206, 1900.
- titanus Ball. W. Va., Ont. 55- 22:12, 1932.
- minor Osb. Iowa. 51- 19:205, 1900.
- cyprius Ball. Iowa. 55- 22:12, 1932.
- paludosus Ball. Fla. 55- 22:13, 1932.

- ochraceous Osb. N.H., N.Y., Pa., Tenn., Ia. 85- 5:242, 1898.
- intricatus Uhl. Eastern and Ia., Neb., Kans. 111- 1:34, 1889.
- triunatus Ball. Ariz. 55- 22:13, 1932.
- sensibilis Ball. Fla. 55- 22:14, 1932.
- nigricans Osb. N.C., Tenn. 70- 11:258, 1910.
- inundatus Ball. Fla. 55- 22:15, 1932.
- melanotus Osb. Pa., Md., Tenn., Tex. 51- 19:207, 1900.
- pullus DeL. & M. Pa., Wis., D.C., Ill. 107- 17:969, 1936.
- obtusatus Osb. N.Y., Fla., Ill., Ia. 51- 19:208, 1900.
- auctus DeL. & M. Pa., Wis., Ill. 107- 17:970, 1936.
- cinerosus Osb. Ill., Ia. 51- 19:208, 1900.
- atlantus Ball. N.J. 55- 22:14, 1932.
- opalinus Osb. N.Y., N.J., Fla. 95- 20:525, 1905.
- brevidentatus DeL. & M. Tenn., Wis., Ohio. 107- 17:971, 1936.
- nigrellus DeL. & M. Ill. 107- 17:973, 1936.
- scelestus DeL. & M. Pa. 107- 17:974, 1936.
- littoralis Ball. Mass. 55- 22:15, 1932.
- luteolus V.D. Ohio, Ia., Ill. 10- 5:210, 1894.
- baculus DeL. & M. Pa., Ohio, Ill. 107- 17:970, 1936.
- OSBORNELLUS Ball. 55- 22:17, 1932
- auronitens (Prov.) Eastern U.S. 89- 3:277, 1889.
- ignavus Ball. Ariz. 9- 31:13, 1936.
- ritanus Ball. Ariz. 55- 22:17, 1932.
- consors (Uhl.) Eastern and Colo., Utah, Tex. 111- 1:36, 1889.
- nugax (V.D.) Calif. 82- 14:419, 1925.
- scalaris (V.D.) Eastern and Ia., Kans., Mo., Ariz., Calif., Wash. 25-
6:51, 1890.
- borealis DeL. & M. B.C. 107- 17:976, 1936.
- filamenta DeL. & B. Tex. 69- 37:266, 1937.
- knulli DeL. & B. Ariz. 69- 37:266, 1937

jucundus (Uhl.) Eastern and Ia., Mo. 111- 1:34, 1889.

cocanus Ball. Fla. 55- 22:18, 1932.

albonotatus (V.D.) Fla. 10- 9:226, 1909.

mirus (V.D.) Calif. 82- 14:419, 1925.

unicolor (Osborne) Eastern and Tex. 51- 19:196, 1900.

PRESCOTTIA Ball. 55- 22:16, 1932

lobatus (V.D.) Eastern and Ia. 10- 5:199, 211, 1894.

brichellia Ball. Ariz. 55- 22:16, 1932.

PORTANUS Ball. 55- 22:18, 1932

stigosus (Uhl.) W. Ind., Cen. Amer. 88- p. 77, 1895.

PLATYMETOPIUS Burm. 11- 1, pl. 14, 1838

palliolata (Ball). Tex. 16- 34:13, 1902.

vitellinus (Fh.) Eastern and N.D., S.D., Man., Ia., Neb., Colo., Utah,
Wash., Br. Col. 37- p. 57, 1851.

JAPANUS Ball. 16- 63:218, 1931

hyalinus (Osborne) Ohio, Pa., D.C., Ill. 28- 11:501, 1900.

SCAPHYTOPIUS Ball. 16- 63:218, 1931

elegans (V.D.) Calif. 25- 6:94, 1890.

var. glennanus Ball. Ariz. 16- 63:220, 1931.

floridans Ball. Fla. 16- 63:220, 1931.

var. roseus Ball. Fla. 16- 63:221, 1931.

catalinus (Ball). Ariz. 16- 41:82; 1909.

ritanus Ball. Ariz. 16- 63:221, 1931.

DELTOPINUS Ball. 16- 63:218, 1931

nigriviridis (Ball). Utah, Calif. 28- 20:163, 1909.

var. dixianus (Ball). Utah, Calif. 28- 20:163, 1909.

hymenocleae (V.D.) Lower Calif. 82- 12:178, 1923.

CLOANTHANUS Ball. 16- 63:219, 1931

angustatus (Osborne) N.Y., Mo. 95- p. 518, 1905.

majestus (Ball). Calif. 28- 20:164, 1909.

fulvus (Osb.) N.Y., Pa., Ohio. 95- p. 519, 1905.

collaris (S. & DeL.) Pa. 4- 12:232, 1919.

PLATYMOIDEUS Ball. 16- 63:219, 1931

trilineatus (Ball). Calif. 28- 27:204, 1916.

pexatus (V.D.) Calif. 82- 41:415, 1925.

rubellus (S. & DeL.) Va. 4- 12:232, 1919.

slossoni (V.D.) Fla., Calif. 4- 3:222, 1910.

oregonensis (Bak.) Colo., N. Mex., Utah, Calif., Ore. 16- 32:49, 1900.

acutus (Say). Eastern and Mo., Kans., Colo., Utah, Calif., Br. Col. 50-
6:306, 1831.

cuprescens (Osb.) Que., Ont., Me., N.Y., N.C., Tenn., Colo., Utah.
95- p. 517, 1905.

latus (Bak.) Que., Ont. 16- 32:50, 1900.

planus (V.D.) Calif. 82- 14:414, 1925.

graneticus Ball. Ariz. 16- 63:226, 1931.

guterrans Ball. Ariz. 16- 63:227, 1931.

abbreviata (DeL.) Tenn. 106- 17:39, 1916.

cinereus (Osb. & Ball). N.C., Fla., Tenn., Ia., Neb., Kans., Ariz.
85- 4:193, 1897.

aequinoctialis (V.D.) James Isl. 82- 21:30, 1933

oviedus Ball. Fla. 16- 63:227, 1931.

NASUTOIDEUS Ball. 16- 63:219, 1931

nasutus (V.D.) Colo., Calif. 10- 8:64, 1907.

diabolus (V.D.) Calif. 82- 14:413, 1925.

verecundus (V.D.) N.C., Fla. 4- 3:227, 1910.

andoromus Ball. Fla. 16- 63:221, 1931.

xanthanus Ball. Ariz. 16- 63:225, 1931.

scriptus (Ball). Tenn., Kans. 28- 20:165, 1909.

calliandrus Ball. Ariz. 16- 63:222, 1931.

celtidis Ball. Ariz. 16- 63:224, 1931.

irroratus (V.D.) Ariz., Calif. 4- 3:227, 1910.

var. nogalinus Ball. Ariz. 16- 63:226, 1931.

dodonanus Ball. Ariz. 16- 63:225, 1931.
anisacanus Ball. Ariz. 16- 63:222, 1931.
loricatus (V.D.) Fla., Colo., Calif. 10- 5:205, 1894.
frontalis (V.D.) Eastern and Mo., Kans., Ia., Calif. 16- 22:112, 1890.
manus (V.D.) Jam., Cuba. 10- 8:65, 1907.
dorsalis (Ball). Kans. 28- 20:164, 1909.
bicolor (DeL.) Tenn. 106- 17:38, 1916.
desertanus Ball. Ariz. 16- 63:225, 1931.
heldoranus Ball. Ariz. 16- 65:226, 1931.
fuscifrons (V.D.) Ariz., Calif. 10- 5:206, 1894.
compactus (Ball). Calif. 28- 27:176, 1916.
magdalensis (Prov.) Eastern U.S. 89- 3:275, 1889.

CONVELINUS Ball. 16- 63:220, 1931

nigricollis (Ball). Utah, Ariz., Calif. 28- 27:205, 1916.
jocosus (V.D.) Lower Calif. 82- 12:179, 1923.
torridus (Ball). Utah, Nev., Calif. 28- 27:205, 1916.
nalis (V.D.) Lower Calif. 82- 12:181, 1923.

var. castranus Ball. Ariz. 16- 63:228, 1931.

brevis (V.D.) Jam. 10- 8:66, 1907.
osborni (V.D.) Cen. Amer. 4- 3:229, 1910.
scutellatus (V.D.) Lower Calif., Mex. 82- 12:180, 1923.
speciosus (V.D.) Lower Calif., Mex. 82- 12:179, 1923.

ACURHINUS Osb. 60- 20:158, 1920

pyrops (Crumb.) Tenn., Pa., Md., N.C., Va., Ohio. 4- 8:191, 1915.

FLEXAMTUS DeL. 72- 2:22, 1926

areolatus (Ball). N.Y., S.C., to Miss., Kans., Mo., Ariz. 16- 31:188, 1899.
sandersi (Osb.) Conn., Pa., Ohio, Tenn., Miss., to Gulf. 83- 10:164, 1907.
reflexus (Osb. & Ball). Ia., Colo., Minn., Kans., Tenn., Miss., N.C., Wis.
85- 4:203, 1897.

prairiana DeL. Ill. 74- 13:32, 1936.

- imputans (Osb. & Ball). Ia., Kans., Wis. 83- 7:75, 1898.
- atlanticus DeL. N.J. 72- 2:29, 1926.
- bidentata DeL. Ill. 4- 28:155, 1935.
- visendus (Crumb.) Fla., Ga., Kans., N.J. 4- 8:189, 1915.
- gramineus DeL. Kans. 72- 2:30, 1926.
- flexulosus (Ball). Colo., Kans., N.D., S.D. 16- 31:189, 1899.
- decora Beam. & Tut. Colo. 53- 7:2, 1934.
- modica Beam. & Tut. N. Mex. 53- 7:3, 1934.
- pictus (Osb.) N.Y., Pa., Kans., Tenn., Miss., Va., Md., Ohio. 83- 10:165,
1907.
- funabulus (Crumb.) Kans. 4- 8:189, 1915.
- pectinatus (Osb. & Ball). Ia., Kans., Neb., Wis., S.D. 85- 4:205, 1897.
- doeringae Beam. & Tut. Ariz. 53- 7:3, 1934.
- abbreviata (Osb. & Ball). Ia., Kans., Colo., Neb., N.D., S.D., Tex.
85- 4:206, 1897.
- rubranura DeL. Ill. 4- 28:154, 1935.
- surculus DeL. and Snees. Tex. 4- 22:99, 1929.
- curvatus DeL. Kans. 72- 2:34, 1926.
- stylatus (Ball). Ia., Neb. 16- 31:190, 1899.
- inflatus (Osb. & Ball). Colo., Ia., Kans., Wis., Ohio, Pa., N.J., to Fla.
85- 4:202, 1897.
- serrata Beam. & Tut. Br. Col. 53- 7:4, 1934.
- albidus (Osb. & Ball). Ia., S.D., Neb., Kans., Mo. 85- 4:201, 1897.
- slossoni (Ball). Fla. 80- 18:119, 1905.
- ritana Beam. Ariz. 16- 68:257, 1936.
- grammicus (Ball). Colo. and Neb. 16- 32:204, 1900.
- ALAPUS DeL. & Snees. 4- 22:86, 1929
- fraternus (Ball). Fla. 16- 43:201, 1911.
- mendosus (Ball). Fla. 16- 43:202, 1911.
- attenuatus Law. Fla. 53- 5:29, 1932.

marcidus Beam. & Tut. Fla. 53- 7:1-2, 1934.

LATULUS DeL. & Slees. 4- 22:87, 1929

configuratus (Uhl.) Me., Wyo., Colo., Mont. 14- 4:511, 1879.

ocellaris (Fall.) Can., Colo., N.Y., Kans. 33- p. 33, 1826.

var. sobrinus DeL. & Slees. Alberta. 4- 22:100, 1929.

sayi (Fh.) Northeastern U.S. 37- p. 61, 1851.

misellus (Ball). Colo., Me., N.H., N.Y., Conn., Pa., Wis., Minn., Utah,
Mo. 16- 31:191, 1899.

cahuilla (V.D.) Calif. 82- 14:417, 1925.

occidentalis DeL. Ore. 72- 2:42, 1926.

latidens (S. & DeL.) Wis. 84- 12:234, 1919.

curtus Beam. & Tut. Br. Col. 53- 7:5, 1934.

mundus Beam. & Tut. Wyo., Br. Col. 53- 7:6, 1934.

uncinatus Beam. & Tut. Ariz., N. Mex. 53- 7:6, 1934.

vagus Beam. & Tut. N. Mex. 53- 7:7, 1934.

PALUS DeL. & Slees. 4- 22:85, 1929

delector (S. & DeL.) Pa., Me., N.H., Ohio, N.Y. 4- 12:223, 1919.

marginatus (DeL.) Wis., N.D., Me. 69- 18:228, 1918.

bilineatus (G. & B.) Colo., Ia. 17- p. 85, 1895.

luteocephalus (S. & DeL.) Wis., S.D. 4- 10:84, 1917.

paludosus (Ball). Colo. 16- 31:307, 1899.

POLYAMIA DeL. 72- 2:46, 1926

micarius (Ball). Fla., Miss., Ga., N.C., S.C. 16- 43:203, 1911.

santana Beam. & Tut. Ariz. 53- 7:12, 1934.

interruptus (DeL.) Tenn., N.C. to Mass., N.Y., Pa., Ohio, Ill. 106-
17:51, 1916.

weedi (V.D.) Eastern U.S., Ia., Kans. 109- 19:306, 1892.

herbida DeL. Ill. 4- 28:155, 1935.

tantilla Beam. & Tut. Ariz. 53- 7:10, 1934.

pulla Beam. & Tut. Fla. 53- 7:11, 1934.

- ritana Beam. & Tut. Ariz. 53- 7:11, 1934.
- singularis Beam. & Tut. Ariz. 53- 7:13, 1934.
- incerta Beam. & Tut. Ariz. 53- 7:13, 1934.
- multicella Beam. & Tut. Ariz. 53- 7:14, 1934.
- texanus DeL. Tex. 72- 2:50, 1926.
- obtectus (Osb. & Ball). Eastern and Ia., Kans., Mo. 83- 7:78, 1898.
- rossi DeL. Ill. 74- 13:32, 1937.
- similaris DeL. & Dav. Tenn., Ill. 16- 67:164, 1935.
- nebulosus (Ball). Colo. 16- 32:341, 1900.
- compactus (Osb. & Ball). Eastern and Wis., Ia., Kans. 85- 4:217, 1897.
- dilata DeL. Ill. 74- 13:33, 1937.
- saxosa DeL. Ill. 4- 28:156, 1935.
- lobata Beam. & Tut. Fla. 53- 7:8, 1934.
- nana Beam. & Tut. Fla. 53- 7:9, 1934.
- sabina Beam. & Tut. Ariz. 53- 7:15, 1934.
- satur (Ball). Colo., Tex., and S.D. 16- 31:309, 1899.
- apicatus (Osb.) Md., Vt. & eastern U.S. 16- 32:285, 1900.
- albonerua (DeL.) Tenn., Miss., Ill. 69- 13:237, 1918.
- brevipennis DeL. & Dav. Ala. 16- 67:164, 1935.
- caperatus (Ball). Eastern U.S., Colo., Neb., Ia. 16- 32:343, 1900.
- gramma DeL. Ill. 4- 28:156, 1935.
- decisus DeL. Fla. 72- 2:55, 1926.
- arundineus (Crumb.) Tenn., Fla., N.C., Miss., Ill. 4- 8:191, 1915.
- montanus DeL. & Sless. Mont., Wash. 4- 22:101, 1929.
- inimicus (Say). Coast to coast. 50- 6:305, 1831.
- fumidus (S. & DeL.) Wis. 4- 10:86, 1917.
- algius DeL. & Dav. Wis. 16- 67:165, 1935.
- kansiensis Tut. Kans. 53- 3:46, 1930.

HEEECEPHALUS DeL. 72- 2:58, 1926

- neomexicanus Tut. N. Mex. 53- 3:44, 1930.
- furcilliatus Beam. & Tut. N. Mex. 56- 22:537, 1935
- callidus (Ball). Wash. 16- 31:306, 1899.
- adversus Beam. & Tut. Ore. 56- 22:536, 1935.
- caecus Beam. Ore. 16- 68:255, 1936.
- irritus Beam. Nev. 16- 68:253, 1936
- borealis DeL. & Dav. Alberta. 16- 67:166, 1935.
- vinculatus (Ball). Colo., Labrador. 16- 31:191, 1891.
- firmus Beam. Wyo. 16- 68:253, 1936.
- algidus DeL. & Dav. Alaska. 16- 67:166, 1935.
- signatrifrons (V.D.) Colo., Ia., Kans., Neb., Mont., N. Mex., Wyo., Utah,
109- 19:305, 1892.
- insularis (V.D.) Charles Isl. 82- 21:30, 1933.
- crassus DeL. Wyo. 72- 2:61, 1926.
- hilaris Beam. Wyo. 16- 68:252, 1936.
- sagittatus Beam. & Tut. Ore. 56- 22:533, 1935.
- truncatus Beam. & Tut. Sask. 56- 22:534, 1935.
- rostratus Beam. & Tut. Ariz. 56- 22:534, 1935.
- occidentalis Beam. & Tut. Mont., Colo. 56- 22:535, 1935.
- sexmaculatus (G. & B.) Colo. 17- p. 88, 1895.
- discessus (V.D.) Calif. 82- p. 416, 1925.
- tener Beam. & Tut. Colo. 53- 7:16, 1934.
- obesus (Osborne & Ball). Tex., Ariz., Mex. 83- 7:81, 1898.
- cruciatus (Osborne & Ball). Ia., N.D. 83- 7:77, 1898.
- obliqua DeL. & Dav. Ida. 16- 67:165, 1935.
- blandus (Gill.) Colo. 17- 43:26, 1893.
- scriptanus Oman. Ariz. 84- 36:77, 1934.
- balli Beam. Ariz. 16- 68:252, 1936.

cartwrighti Oman. Calif. 84- 34:90, 1932.

wilsoni Oman. Calif. 84- 34:91, 1932.

cinerosus (V.D.) Calif. 109- 19:305, 1892.

minimus (Osb. & Ball). Ia., Kans., Neb., S.D., Wis. 85- 4:211, 1897.

parvulus (Gill.) Colo., Kans., Neb. 17- 43:23, 1898.

melsheimerii (Fh.) N.Y., Me., to gulf coast and Kans., Ia., Colo. 37-
p. 61, 1851.

unicoloratus (G. & B.) Colo., S.D., Kans., Neb., and Ia. to N.Y., N.H.,
Conn., Pa., Tenn., Tex. 17- p. 89, 1895.

pravus DeL. Ill. 74- 13:34, 1937

caricis (G. & B.) Colo. 74- p. 95, 1895.

poudris Tut. Colo., Wyo. 53- 3:44, 1930.

sylvestris (Osb. & Ball). Ia., Me., Gr. Lakes to Gulf Coast. 85- 4:213, 1897.

rotundens DeL. & Dav. Me. 16- 67:167, 1935.

acus (S. & DeL.) Pa., Wis., N.Y., Conn. 75- 1:10, 1920.

convergens DeL. Colo. 103- 2:70, 1926.

siclus DeL. & Dav. Ida., S.D., Utah. 16- 67:169, 1935.

austrinus DeL. & Dav. Tex. 16- 67:169, 1935.

pascuellus (Fall.) Me., N.Y., Pa., Can. 33- p. 32, 1826.

canadensis DeL. Can. 103- 2:71, 1926.

abdominalis (Fabr.) Me., N.H., Labr., Que., Ont., N.Y., Colo. 32-
p. 98, 1803.

uhleri Oman. Colo., Me., N.H., N.Y., Pa., Va., Tenn., Mo., Ia., Kans., Ont.
55- 21:432, 1931.

orientalis DeL. & Dav. Can., Ill., Pa., D.C., Va., Tenn. 16- 67:167, 1935.

debilis (Uhler). Wyo., Colo. 14- 1:360, 1876.

caydi Deay. 16- 49:55, 1927.

orbiculus DeL. & Sless. 4- 22:103, 1929.

spicatus DeL. Kans. 103- 2:74, 1926.

amplectus DeL. Calif. 4- 28:157, 1935.

- littoralis* (Ball). Atlantic and Gulf Coasts. 80- 18:120, 1905.
- bidentatus* DeL. & Dav. Colo. 16- 67:169, 1935.
- collinus* (Boh.) Ia., Colo., Kans., S.D., N.D., Wyo., N.Mex. 1- p. 261,
1850.
- plagus* Ball & DeL. Wis. 54- 34:241, 1926.
- labeculus* DeL. N.D., Wyo., Mont. 103- 2:76, 1926.
- bocanus* Oman. Tex. 84- 36:78, 1934.
- shingwauki* Beam. & Tut. Minn., Ill. 53- 7:19, 1934.
- concinus* (S. & DeL.) Wis. 4- 10:86, 1917.
- var. *incisurus* (DeL.) Wis. 103- 2:77, 1926.
- monticolus* (G. & B.) Colo. 17- p. 88, 1895.
- aridus* Oman. Ariz. 84- 36:77, 1934.
- tritatus* Beam. & Tut. Ariz. 53- 7:17, 1934.
- helvus* DeL. Wyo., N.D. 72- 2:78, 1926.
- exectus* DeL. Colo., Mont. 72- 2:78, 1926.
- subrutilus* DeL. & Sless. N.D. 4- 22:103, 1929.
- auratus* (G. & B.) Colo., Wyo., Mont., N.D. 17- p. 85, 1895.
- perpusillus* Ball & DeL. Mont. 54- 34:241, 1926.
- flavovirens* (G. & B.) Western, Wis. 17- p. 87, 1895.
- bimaculatus* (G. & B.) Colo. 17- p. 86, 1895.
- emarginatus* (G. & B.) Colo. 17- p. 96, 1895.
- cookei* (Gill.) Colo., S.D. 17- 43:24, 1898.
- striatus* (Linn.) Coast to coast. 61- ed. 1, p. 642, 1746.
- ferratus* DeL. & Dav. Pa. 16- 67:170, 1935.
- attenuens* DeL. & Dav. Wyo. 16- 67:170, 1935.
- latipex* DeL. & Dav. Colo., Neb. 16- 67:170, 1935.
- totalus* DeL. & Dav. Ida., Wyo. 16- 67:171, 1935.
- amplus* DeL. & Dav. Calif. 16- 67:171, 1935.
- shoshone* DeL. & Dav. Ida. 54- 42:221, 1934.
- saladurus* Ball & DeL. Nev. 54- 34:242, 1926.

cicatrix DeL. & Slees. Alberta. 4- 22:102, 1929.

ordinatus (Ball). Colo., N.D. 16- 31:307, 1899.

larrimeri DeL. Mont. 72- 2:82, 1926.

AMPLICEPHALUS DeL. 71- 11:83, 1926

simplex (V.D.) Md., N.Y., and N.J., Conn., Va. 109- 19:304, 1892.

osborni (V.D.) Me., to Colo., Mo. and Neb., N.Y. 109- 19:304, 1892.

lawsoni DeL. Kans., Miss. 109- 52:89, 1926.

atascasus (Ball). Ariz. 9- 31:19, 1936.

lassus (Ball). Calif., Mont., Wyo. 28- 27:175, 1916.

concentricus (V.D.) Colo. 10- 5:208, 1894.

estacodus (Ball). Tex., Tenn. 28- 43:200, 1911.

escalantus (Ball). Utah, Wyo. 28- 27:175, 1916.

DELTOCEPHALUS Burm. 15- 1, pl. 14, 1838

castoreus Ball. Colo., Wyo., Mont. 16- 31:308, 1899.

gnarus Ball. Ia., Tenn., S.D. 16- 32:345, 1900.

minutus V.D. Calif., Ia. 25- 6:96, 1890.

marinus Met. & Ost. N.C., Fla. 4- 13:110, 1920.

zephyrius V.D. Wash. 82- 14:418, 1925.

nigriventer S. & DeL. Wis., N.Y., Que., S.D. 4- 10:85, 1917.

australis DeL. Fla., Miss. 72- 2:90, 1926.

dentatus (Osborne & Ball). Colo., Wyo., Kans. 83- 7:95, 1898.

yavapai Tut. Ariz., Tex. 53- 3:45, 1930.

flavicosta Stal. Eastern, southern, Kans., Mo., Ia. 103- 2:53, 1862.

laredanus Oman. Tex. 84- 36:78, 1934.

punctatus (Osborne & Ball). Ia., Neb., Calif. 83- 7:94, 1898.

valens Beam. & Tut. Wyo., Colo. 53- 7:20, 1934.

durus Beam. & Tut. Ariz. 53- 7:20, 1934.

pulicarius (Fall.) Me. 34- p. 95, 1807.

chintinomy DeL. Ore. 72- 2:92, 1926.

sonorus Ball. Ariz., Tex., Fla., N.C., S.C., Miss., N.Mex., Calif., Tenn.,
Kans. 16- 32:544, 1900.

balli V.D. Ia., Wis., Ohio, Pa. 109- 21:293, 1894.

fuscinervosus V.D. Colo. to Pacific coast. 10- 5:207, 1894.

turbineus DeL. & Dav. Colo. 16- 67:171, 1935.

vanduzei G. & B. Colo to Pacific coast. 17- p. 90, 1895.

megalopus Osb. & Ball. Ia. 83- 7:85, 1898.

lineatifrons Oman. Colo. 55- 21:432, 1931.

contrerasi V.D. Lower Calif., Mex. 82- 12:182, 1923.

UNERUS DeL. 69- 36:219, 1936

nigrifrons (Forbes). Eastern and Ia., Colo. 93- 14:67, 1864.

colonus (Uhl.) Fla. & southern. 88- p. 80, 1895.

comatus (Ball). 16- 32:343, 1900.

LONATURA Osb. & Ball. 83- 7:83, 1898

bicolor V.D. Fla., Ala. 10- 9:221, 1909.

var. melleus DeL., Fla. 54- 32:64, 1924.

balli DeL. Fla. 109- 52:97, 1926.

notata Osb. Fla., Miss. 39- 6:13, 1922.

catalina Osb. & Ball. Ia., S.D., Tenn., Ill. 83- 7:83, 1898.

salsura Ball. Colo., Utah, Nebr. 16- 31:310, 1899.

melina DeL. Utah, Colo. 109- 52:100, 1926.

noctivaga Ball. Colo. 16- 32:342, 1900.

pupa V.D. Utah. 82- 14:423, 1925.

ventralis V.D. Lower Calif. 82- 12:182, 1923.

nana V.D. Lower Calif. 82- 12:183, 1923.

GILLETTELLA Osb. 4- 23:689, 1930

labiata (Gill.) Colo. 17- 43:26, 1898.

atropuncta (Gill.) Colo., Kans., Tex. & Neb. 17- 43:28, 1898.

AMPHIPYGA Osb. 18- 14:289, 1928

- reticulata Osb. Utah. 4- 23:691, 1930.
occidentalis (Bak.) Colo., N.D. 90- 8:186, 1898.
aridella Osb. Ariz. 4- 23:693, 1930.
alta Osb. Mont., N.D., S.D. 4- 23:693, 1930.
stylata Osb. Colo. 4- 23:694, 1930.
californica Osb. Calif. 4- 23:696, 1930.
acuticauda (Bak.) Ill., Ia., Me., Mont., S.D., Colo., N.D., N.Y.
90- 8:187, 1898.
balli Osb. Ia., Ohio. 68- 14:289, 1928.
nigrofascia DeL. & Dav. Calif. 54- 42:222, 1934.

PECTINAPYGA Osb. 4- 23:697, 1930

- texana Osb. Tex., Kans. 4- 23:697, 1930.

ATHYSANELLA Bak. 90- 8:185, 1898.

- robusta Bak. Colo., Ia., Kan., Neb. 90- 8:189, 1898.
montana Osb. Mont. 4- 23:700, 1930.
magdalena Bak. N. Mex., Colo. 90- 8:185, 1898.
attenuata Bak. Colo. 90- 8:188, 1898.
gardenia Osb. Colo. 4- 23:701, 1930.
curtipennis (G. & B.) Colo. 17- p. 92, 1895.
terebrans (G. & B.) Colo. 17- p. 102, 1895.
extrusa Osb. N. Mex. 4- 23:703, 1930.
yumana Osb. Ariz. 4- 23:704, 1930.
excavata Osb. Tex. 4- 23:704, 1930.
utahna Osb. Utah. 4- 23:705, 1930.

KINONIA Ball. 9- 28:224, 1933

- elongata Ball. Ariz. 9- 28:224, 1933.

GLADIONURA Osb. 4- 23:706, 1903.

- recurvata Osb. Ariz. 4- 23:706, 1930.
aridicola Osb. Ariz. 4- 23:707, 1930.

sinuata Osb. Colo. 4- 23:707, 1930.
abbreviata Osb. S.D. 4- 23:708, 1930.
emarginata Osb. Tex. 4- 23:708, 1930.
frigida Osb. Colo. 4- 23:709, 1930.
argenteola (Uhler). Colo., Kans. 14- 3:473, 1877.
viridia Osb. Kans. 4- 23:710, 1930.
extensa Osb. Kans. 4- 23:711, 1930.
nacazarana Osb. Mex. 4- 23:711, 1930.

DRIOTURA Osb. & Ball. 85- 7:87, 1898.

robusta Osb. & Ball. N.C., Tenn., Ia., Colo., Miss., Kans. 85- 7:87, 1898.
gammaroides V. D. U.S. east of Rockies. 10- 5:209, 1894.
var. flava Osb. & Ball. Ia., N.Y., Ill., Utah, Miss. 81- 7:90, 1898.
var. fulva Osb. & Ball. Colo., Tenn., Utah, Ill., Tex. Kans. 16-
35:231, 1903.

vittata Ball. Colo., N. Mex., Ariz., Tex., Kans. 16- 35:231, 1903.
var. nigra Law. Ariz., Colo., N. Mex. 4- 21:456, 1928.

UNOKA Law. 4- 21:456, 1928

ornata (Gill.) Colo., Neb., Kans., N.Mex., Ariz. 17- 43:29, 1898.

REMADOSUS Ball. 109- 55:3, 1929

magnus (Osb. & Ball). Wyo., Colo. to Ia., Minn., Neb., Kans., La., Miss.,
Fla. 85- 4:235, 1897.

fumidus (Osb.) Ga. and Fla. 39- 6:19, 1922.

ATHYSANUS Burm. 15- 1, pl. 14, 1838

frigidus Ball. Colo., Utah, Nev., Calif., N.D., Ida. 28- 10:172, 1899.

almus (V.D.) Calif. 82- 14:421, 1925.

EXITIANUS Ball. 109- 55:5, 1929

digressus (V.D.) James Is. 82- 21:32, 1933.

obscurinervis (Stal.) Throughout U.S. 58- p. 293, 1858.

picatus Gibs. Haiti, Mex., Ariz. 80- 52:26, 1919.

armus Ball. Ariz. 9- 28:227, 1933.

kinoanus Ball. Mex., Ariz. 9- 31:72, 1936.

DRYLIX Edw. 27- 58:207, 1922

striolus (Fall.) N.E. U.S., Colo., N.D., S.D. 1- 27:31, 1906.

parallelus (V.D.) N. E. U.S. to Colo. 16- 23:169, 1891.

truncatus Snees. Ohio, Mo., Kans. 25- 10:100, 1929.

divaricatus (S. & DeL.) Pa., Ida. 34- 25:151, 1923.

uneolus Ball. Utah. 109- 55:6, 1929.

medianus Law. Minn. 4- 24:588, 1931.

utahnus Law. Utah. 4- 24:590, 1931.

EUSCELIS Brul. 7- 3:109, 1832

extrusus (V.D.) N. E. U.S. 16- 25:283, 1893.

ovatus S. & DeL. Kans., Tex. 75- 3:161, 1920.

alpinus (Ball). Colo., N.H. 28- 10:173, 1899.

obsoletus (Kirsch.) U.S. 57- p. 7, 1858.

sahlbergi (Reut.) New England, Ohio, Ill., Wis., S.D. 64- 5:209, 219, 1880.

deceptus S. & DeL. 4- 10:87, 1917.

relativus (G. & B.) N.E. U.S., Ill., Ia., Wis., Colo. 17- p. 93, 1895.

maculipennis DeL. & Dav. Ida. 54- 42:221, 1934.

hyperboreus V.D. Alaska. 92- 3:4^F, 1919.

OPHIOLA Edw. 27- 58:206, 1922

uhleri (Ball). N.E. U.S., Colo., S.D. 16- 43:200, 1911.

var. speculata Ball. N.Y. 9- 23:187, 1928.

anthracina (V.D.) N.E. U.S., Colo., Ia., Kans. 16- 26:136, 1894.

arctostaphyli (Ball). Colo., Me., N.H., Conn., Colo. 28- 10:172, 1899.

humida (Osb.) Me., Wis. 61- 238:131, 1915.

shasta (Ball). Calif. 28- 23:174, 1916.

gentilis (V.D.) Calif., Ore., Mont. 82- 14:420, 1925.

finitima (V.D.) B.C., Calif., Ore., Mont. 82- 14:422, 1925.

calvata (Ball). Utah, Colo., Ida. 16- 27:5, 1901.

glomerosa Ball. 16- 43:308, 1910.

cornicula Marsh. N.E. U.S.. 27- 2 & 3:198, 1866.

plutonius Uhl. 14- 3:470, 1877.

instabilis V.D. 16- p. 284, 1893.

elongatus Osb. 63- 238:129, 1915.

angustata (Osb.) Me., N.Y. 61- 238:130, 1915.

cuneata (S. & DeL.) eastern U.S. 75- 3:17, 1920.

symphoricarpae (Ball). Colo., Mass., Wis. 16- 33:5, 1901.

vara (Ball). Colo. 16- 33:5, 1901.

striatula (Fall.) Me. to Ia & Colo. 33- p. 45, 1926.

var. cacheola Ball. Utah. 9- 23:189, 1929.

osborni Ball. Me. to Mont. & Colo., Ont. and south to Md. 9- 23:190, 1928.

luteola Snees. Mass. 25- 10:120, 1929.

comptoniana Ball. N.J., N.Y., Pa. 9- 23:189, 1928.

COMELLUS Osb. & Ball. 70- 2:245, 1902.

comma (V.D.) Ia., Neb., Kans., Colo., N.H., N.Y. 16- 24:114, 1892.

colon (Osb. & Ball). Ia., Minn. 85- 4:223, 1897.

sexvittatus (V.D.) Colo., Mont. 16- 26:93, 1894.

planus Thomas. Utah. 53- 6:133, 1933.

STIRELLUS Osb. & Ball. 70- 2:250, 1902.

bicolor (V.D.) Southern & eastern, Ia., Nebr. Kans. 16- 24:114, 1892.

obtus (V.D.) Miss., throughout south and S.W. 16- 24:115, 1892.

beameri Ball. Ariz. 9- 23:226, 1933.

dixanus Thomas. Miss., N.C. 53- 6:131, 1933.

var. acutus Thomas. Fla., Miss., Ala. 53- 6:132, 1933.

var. robustus Thomas. Kans., Miss., Tex. 53- 6:132, 1933.

convexus Thomas. Kans., Ia., La. 53- 6:130, 1933.

mexicanus Osb. & Ball. Ark., Tex. 70- 2:254, 1902.

PENESTIRELLUS Beam. & Tut. 53- 7:21, 1934

catalinus Beam. & Tut. Ariz. 53- 7:22, 1934.

AMBLYSELLUS Sless. 25- 10:131, 1929

curtisii (Fh.) N.E.U.S., Tenn., Ia., Mo. 37- p. 81, 1851.

EUTETIX V.D. 90- 6:307, 1892

luridus (V.D.) Eastern only. 16- 22:250, 1890.

marmoratus V.D. Eastern and N.D., Colo. 109- 19:302, 1892.

southwicki (V.D.) N.Y., N.J., Md., D.C., Ia., Colo. 10- 5:209, 1894.

subaeneus (V.D.) Colo., Calif. 25- 6:77, 1890.

goniana Ball. Ariz. 39- 15:1, 1931.

glemnana Ball. Ariz. 39- 15:2, 1931.

querci G. & B. Colo., Utah. 17- p. 101, 1895.

tristis Ball. N.J., Md., D.C., Ga., Fla. 83- 12:34, 1907.

bartchi V.D. Fla. 10- 9:223, 1909.

pictus V.D. Eastern and Ark. 109- 19, 301, 1892.

slossoni V.D. Mass., N.J., D.C., Fla., Tex. 10- 5:210, 1894.

nitens V.D. Fla. 10- 9:223, 1909.

OLLARIANUS Ball. 9- 31:59, 1936

balli (V.D.) Jamaica. 10- 8:(no. 5) 68, 1907.

rubianus Ball. Ariz. 55- 26:432, 1936.

bullatus Ball. Ariz. 55- 26:433, 1936.

ollus Ball. Ariz. 55- 26:433, 1936.

rudiculus Ball. Ariz. 55- 26:434, 1936.

OPSIUS Fieb. 117- 16:505, 1866.

stactogalus Amyot. Coast to coast. 5- 2nd ser. 5:217, 1847.

osborni Ball. 83- 12:39, 1907.

NORVELLINA Ball. 39- 15:2, 1931

mildredae (Ball). Colo., N.Mex., Ariz. 16- 33:45, 1901.

perelegantis (Ball). Colo., Utah. 16- 33:46, 1901.

- pullatus* (Ball). Colo., Utah, N.Mex., Ariz. 16- 33:43, 1901.
- scitulus* (Ball). Colo., Utah, N.Mex., Ariz. 16- 33:47, 1901.
- chenopodium* (Osb.) Eastern & Mo., Ia., Neb., Kans., Colo., Utah. 69-
23:161, 1923.
- helenae* (Ball). Fla., Tex., Mo., Ky. 39- 15:3, 1931.
- clarivida* (V.D.) Mo., Colo., Utah. 16- 26:138, 1894.
- insanus* (Ball). Colo., Utah, Calif. 16- 32:203, 1900.
- pauperculus* (Ball). Colo., Utah. 16- 35:228, 1903.
- strictus* (Ball). Colo., Tex., Ariz. 16- 32:204, 1900.
- tenellus* (Bak.) Colo., Utah, N.Mex., Ariz., Calif., Fla. 90- 7:suppl.
p. 24, 1896.
- seminudus* (Say). Eastern & Ia., Mo., Kans., Tex. 50- 6:307, 1831.
- columbianus* (Ball). Wash. 16- 48:125, 1916.
- amandus* (Ball). Ariz. 16- 41:32, 1909.
- snowi* (Ball). Ariz. 83- 12:49, 1907.
- saucius* (Ball). Colo., Utah, Calif. 16- 33:46, 1901.
- nevada* (Ball). Nev. 16- 48:126, 1916.
- pulchellus* (Bak.) Ia., N.Mex., Ariz. 90- 7:24, suppl. 1, 1890.
- oregona* Ball. Oregon. 39- 15:3, 1931.
- albidus* (Ball). Colo., Utah, Ariz. 16- 32:203, 1900.
- ziczac* (Crumb.) Tex. 4- 8:195, 1915.
- pannosus* (Ball). Calif. 16- 24:12, 1902.
- rubidus* (Ball). Utah. 16- 48:126, 1916.
- texanus* (Ball). Tex. 83- 12:52, 1907.
- bicoloratus* (Ball). Ark., Utah. 16- 37:212, 1905.
- MENOSOMA* Ball. 39- 15:2, 1931
- stonei* Ball. Fla. 39- 15:5, 1931.
- cincta* (Osb. & Ball). Eastern and Ia., Colo., Tex. 83- 7:97, 1898.
- var. binaria* Ball. Fla. 39- 15:5, 1931.
- tortolita* Ball. Ariz. 39- 15:6, 1931.

acuminata (Bak.) Southwest. 90- 7:25, suppl. 1, 1896.

litigiosa Ball. Mex. 39- 15:5, 1931.

PHLEPSIUS Fieb. 117- 16:503, 1866

ishidae Matsumura. N.J. 65- 25:382, 1902.

tinctorius S. & DeL. N.J. 4- 12:235, 1919.

utahus Ball. Utah, N.Mex. 16- 41:79, 1909.

arizonus Osb. & Lath. Ariz. 4- 16:316, 1923.

pulchripennis Bak. Southern states. 28- 9:65, 1898.

granticus Osb. & Lath. Me. 4- 16:317, 1923.

costomaculatus V.D. Tex., Mex. 10- 5:207, 1894.

attractus Ball. Fla., S.C., N.C., Ala. 16- 41:77, 1909.

floridanus Ball. 16- 41:78, 1909.

loculatus Ball. Utah and Calif. 16- 48:128, 1916.

nevadus Ball. Nev. 74- 8:87, 1931.

lycioides Ball. Ariz. 74- 8:38, 1931.

var. mohavensis Ball. Ariz. 74- 8:88, 1931.

condalianus Ball. Ariz. 74- 8:39, 1931.

var. ursinus Ball. Ariz. 74- 8:89, 1931.

denudatus Ball. N.Mex., Ariz., S. Calif. 16- 33:11, 1901.

var. carpolus Ball. Ariz. 74- 8:87, 1931.

stellaris Ball. Utah. 16- 48:129, 1916.

operculatus Ball. Fla. 16- 59:265, 1927.

latifrons V.D. Tenn., N.C., Ga., Fla. 109- 19:66, 1892.

maculosus Ball. Ohio. 70- 5:276, 1905.

pusillus Bak. Md., D.C. 28- 9:66, 1898.

fuscipennis V.D. Eastern U.S., N.Y. to Fla. 109- 19:70, 1892.

var. turpiculus Ball. Colo., Neb., Kans., Tex., La., Mo., Ill., Ga.,
S.C. 16- 32:200, 1900.

tigrinus Ball. D. C., Ohio. 16- 41:30, 1909.

miconotatus Osb. & Lath. Mex. 4- 16:321, 1923.

- collitus Ball. Me. to Fla. and west to Ia. 16- 35:227, 1903.
- vanduzei Ball. Colo. 16- 33:9, 1901.
- nigrifrons Ball. Ark. 16- 37:210, 1905.
- pallidus V.D. Tex. 109- 19:69, 1892.
- cinereus V.D. Tex., Ia., Kans., Fla., Miss., La., Ohio, N.C. 109-
19:68, 1892.
- minus Bak. Fla., N.C., N.J. 28- 9:67, 1898.
- cottoni S. & DeL. 84- 24:98, 1922.
- lascivius Ball. Colo., Neb., N.D., Mont., Ariz. 16- 32:200, 1900.
- collinus Osb. & Lath. D.C. and N.C. 4- 16:324, 1923.
- divergens Oman. Tex. 55- 21:435, 1931.
- altus Osb. & Ball. Western prairies and plains. 85- 4:223, 1897.
- obvius Oman. Tex. 55- 21:435, 1931.
- incisus V.D. Mass., Ohio, N.Y., Pa., Mich., Tenn. 109- 19:73, 1892.
- tubus Ball. D.C., N.C., Ala. 16- 41:78, 1909.
- irroratus (Say). Coast to coast. 50- 6:308, 1831.
- truncatus V.D. Pa. and Fla. to Ia. 109- 9:72, 1892.
- docilis V.D. Lower Calif. 82- 12:184, 1923.
- lobatus Osb. Ia., Wis., Kans. 85- 5:247, 1898.
- maculellus Osb. Me., N.Y. 63- 238:141, 1915.
- tennessa DeL. Tenn., S.C., Ohio, D.C., N.C., Tex. 106- 17:75, 1916.
- torridus Lath. S.C., N.C., Va. 69- 17:126, 1917.
- rileyi Bak. Tex. 16- 30:32, 1898.
- brunneus DeL. Tenn., Ohio, Ill. 106- 17:74, 1916.
- texanus Bak. Tex. 16- 30:31, 1898.
- apertus V.D. Northern U.S., Me. to Rocky Mts. 109- 19:76, 1892.
- apertinus Osb. & Lath. Ore. and Calif. 4- 16:329, 1923.
- carolinus Lath. S.C., Tenn. 69- 17:127, 1917.
- bipartitus DeL. Fla. 109- 52:90, 1926.
- particolor S. & DeL. Pa. 75- 3:15, 1920.

- fulvidorsum Fh. Eastern U.S. to Rocky Mts. 37- p. 62, 1851.
- eburneolus Osb. & Lath. Va. 4- 16:331, 1923.
- tullahomi DeL. Tenn., Ohio, Ala. 106- 17:73, 1916.
- slossoni Ball. Fla., N.C., S.C. 16- 37:209, 1905.
- fastuosus Ball. N. Mex. 16- 37:210, 1905.
- franconianus Ball. N.H. 16- 35:228, 1903.
- lippulus Ball. Fla., Miss., Tex. 16- 35:227, 1903.
- fulviceps Osb. & Lath. La. 4- 16:333, 1923.
- uhleri V.D. Md. 109- 19:67, 1892.
- strobi (Fh.) N.Y., Ohio. 41- p. 58, 1851.
- punctiscriptus V.D. Fla., Tenn., Kans., Tex., Neb. 109- 19:75, 1892.
- planus S. & DeL. Fla. 84- 24:98, 1922.
- nebulosus V.D. Eastern U.S. to Colo. 109- 19:77, 1892.
- solidaginis Walk. Eastern U.S. to Kans. 119- 3:847, 1851.
- josea Ball. Colo. 16- 32:347, 1900.
- occidentalis Bak. Wash., Ore., Calif. 28- 9:66, 1898.
- nudus Ball. Fla. 16- 43:204, 1911.
- bifidus S. & DeL. Wis., N.Y. 4- 10:89, 1917.
- ramosus Bak. N.E. United States. 16- 29:158, 1897.
- tenuifrons S. & DeL. Pa. 4- 12:235, 1919.
- extremus Ball. Colo., Calif., Ore. 16- 33:10, 1901.
- TEXANANUS Ball. 4- 11:364, 1913
- eugeneus Ball. Mex. 4- 11:384, 1913.
- superbus V.D. S.C., Fla. to Calif. (southern) 109- 19:81, 1892.
- oregonus Ball. Calif., Ore., Wash. 74- 8:85, 1931.
- excultus Uhl. Eastern U.S. 14- 3:467, 1877.
- agrillaceus V.D. Lower Calif. 82- 12:135, 1923.
- rufusculus Osb. & Lath. Mo., Ohio. 4- 16:340, 1923.
- umbrosus S. & DeL. Wis. 4- 10:83, 1917.

- cumulatus Ball. Kans., Neb. 16- 32:202, 1900.
- ovatus V. D. Kans., Colo., Tex., Ore. 109- 19:79, 1892.
- mexicanus Ball. Mex. 4- 16:341, 1923.
- distinctus Lath. S.C., N.C., Fla., Miss. 69- 17:129, 1917.
- graphicus Ball. Colo., Neb. 16- 32:201, 1900.
- lathropi Bak. Ore. 4- 16:342, 1923.
- annulatus Osb. & Lath. 4- 16:342, 1923.
- notatipes Osb. & Lath. Wash. 4- 16:343, 1923.
- hosanus Ball. Mex. 4- 11:386, 1918.
- decorus O. & B. Ia., Ill., Ohio, N.Y., Me., M.C., Tenn., Fla. 85- 4:230,
1897.
- sonorus Ball. Ariz. 9- 31:19, 1936.
- areolatus Bak. Kans., Ill. 16- 30:30, 1898.
- spatulatus V. D. Colo., Calif., Kans., Tex., Mex. 109- 19:73, 1892.
- var. personatus Bak. 16- 30:30, 1898.
- sabinus S. & DeL. Ariz. 75- 3:15, 1920.
- denticulus Osb. & Lath. Calif. 4- 16:345, 1923.
- neomexicanus Bak. N. Mex. 90- 7:13, suppl. 1, 1895.
- incurvatus Osb. & Lath. Ariz. and Calif. 4- 16:346, 1923.
- cinerosus Osb. & Lath. N. Mex. 4- 16:347, 1923.
- delicatus Osb. & Lath. Calif. 4- 16:347, 1923.
- elongatus Ball. Mex. 4- 11:382, 1918.
- handlirschi Ball. Mex. 4- 11:383, 1918.
- hebraeus Ball. Mex. 4- 11:383, 1918.
- majestus Osb. & Ball. Ia., Ohio, N.J., N.C., Tex. 85- 4:229, 1897.
- FIEBERELLI Sign. 123- p. 97, 1878
- flori Stal. Conn., Ill. 5- p. 67, 1864.

ACINOPTERUS V.D. 90- 5:307, 1892

- acuminatus V.D. Eastern and Colo., Utah, Ariz., Calif., La. 90- 6:308,
1892.
- angulatus Law. Southwestern U.S. 56- 14:119, 1922.
- inornatus (Bak.) N. Mex. 90- 7:13, (suppl. 1) 1895.
- viridis Ball. Tex. 16- 35:231, 1903.
- brunneus Ball. Nev. 16- 35:231, 1903.
- pallidus Law. Calif. 56- 14:124, 1922.
- productus Law. Nev., Tex. 56- 14:122, 1922.
- var. albidus Law. Ariz. 4- 20:236, 1927.
- var. fulvus Law. Ariz. 4- 20:236, 1927.
- lactus Law. Ariz., Nev. 4- 20:233, 1927.
- arizonanus Law. Ariz. 4- 20:234, 1927.
- pulchellus Law. Ariz. 4- 20:234, 1927.
- pruinosis Law. Ariz. 4- 20:235, 1927.
- inflatus Law. Ariz. 4- 20:235, 1927.
- doeringi Law. Ariz. 4- 20:235, 1927.
- balli Law. Nev., Calif. 4- 20:236, 1927.
- catalinanus Law. Ariz., Nev. 4- 20:237, 1927.
- parvulus Law. Calif. 4- 20:237, 1927.
- latus Law. "Dacota Rothemer". 4- 20:237, 1927.
- rileyi Law. Tex. 4- 20:238, 1927.
- bakeri Law. Ariz. 4- 20:238, 1927.
- spatiosus Law. Tex. 74- 6:136, 1930.
- fusifrons Law. Tex. 53- 4:59, 1931.
- rubrus Law. Calif. 53- 4:59, 1931.
- longipennis Law. Calif. 53- 4:60, 1931.
- elongatus Law. Utah. 4- 20:238, 1927.
- obtusus Law. Nev. 56- 14:127, 1922.
- aridellus Osb. Calif. 74- 2:22, 1925.

IDIODONUS Ball. 9- 31:57, 1936

kennicotti (Uhl.) Eastern and Colo., Br. Col. 79- 2:161, 1963.

snowi Ball. Ariz. 9- 32:26, 1937.

delongi Ball. Fla. 9- 32:26, 1937.

subcupraeus (Prov.) East coast. 66- 4:277, 1872.

brittoni (Osb.) Conn., N.C., Tenn. 83- 10:166, 1907.

morsei (Osb.) Me. 63- 238:134, 1915.

rufescens (Osb.) Me. 63- 238:135, 1915.

cockerelli (Ball). Me., Colo. 16- 32:339, 1900.

aurantiacus (Prov.) Que. 66- 4:377, 1872.

heidemani (Ball). Colo., Calif. 16- 32:338, 1900.

var. chenonus Ball. Calif. 9- 32:26, 1937.

wickhami Ball. Ariz. 9- 32:27, 1937.

osborni (Ball). Neb., Colo. 16- 32:337, 1900.

terminalis Ball. Ariz. 9- 32:27, 1937.

schwarzi (Ball). Utah, Ariz. 16- 43:197, 1911.

beameri Ball. Ariz. 9- 32:28, 1937.

geminatus (V.D.) Colo., Calif., Wash., Alaska. 25- 6:79, 1890.

uhleri Ball. Calif. 9- 32:28, 1937.

kirkaldyi (Ball). Calif. 16- 43:197, 1911.

coquilletti (V.D.) Colo., Calif. 25- 6:77, 1890.

COLLADONUS Ball. 9- 31:57, 1936

clitellarius (Say). Eastern, Mo., Kans., Colo. 50- 6:309, 1831.

var. marcidus Ball. Ia., Wis., Ky., Ill. 9- 32:29, 1937.

furculatus (Osb.) Ohio, Pa. 70- 5:275, 1905.

collaris (Ball). N. Y. 16- 34:15, 1902.

montanus (V.D.) Colo., Calif., Br. Col., Ida., Ore. 16- 24:268, 1892.

var. reductus (V.D.) Calif. 82- 7:298, 1917.

var. mulsus Ball. Calif., Colo., Nev. 9- 32:29, 1937.

- eburatus (V.D.) Ont., Me., N.Y., Pa. 16- 21:10, 1889.
- egenus Ball. Er. Col., Utah. 9- 32:30, 1937.
- mendicus (Ball). Colo., Calif. 16- 34:16, 1902.
- cachellus Ball. Utah. 9- 32:30, 1937.
- belli (Uhl.) Eastern, Colo., Ariz., Er. Col. 14- 3:471, 1877.
- var. gilletti (V.D.) Colo. 16- 24:267, 1892.
- var. brunneus (Osb.) Me. 63- 258:135, 1915.
- waldanus (Ball). Ont., Me., Colo., Manitoba. 16- 35:229, 1903.
- taxodii (S. & DeL.) Fla. 84- 25:154, 1923.
- citrinifrons (G. & B.) Colo. 17- 31:95, 1895.
- fasciaticollis (Stal.) Calif. 105- 25:86, 1864.
- luctuosus (Stal.) Calif. 58- p. 292, 1895.
- arculus Ball. Ore. 9- 32:31, 1937.
- tahotus Ball. Calif. 74- 12:194, 1936.
- ponderosus Ball. Ariz. 9- 32:31, 1937.
- CONODONUS Ball. 9- 31:58, 1936
- flavocapitatus (V.D.) Colo., Calif. 25- 6:80, 1890.
- commissus (V.D.) Calif. 82- 7:299, 1917.
- atropunctatus (V.D.) Calif. 25- 6:77, 1890.
- juanata (Ball). Calif. 16- 46:231, 1914.
- aureolus (V.D.) Calif. 10- 5:213, 1894.
- GLORIDONUS Ball. 9- 31:58, 1936
- gloriosus (Ball). Calif. 16- 42:303, 1910.
- generosus (Ball). Calif. 16- 42:304, 1910.
- gemellus (Ball). Calif. 16- 42:303, 1910.
- helvinus (V.D.) Calif. 82- 7:300, 1917.
- lenis (V.D.) Calif. 82- 14:423, 1925.
- gladiolus (Ball). Colo. 16- 42:309, 1910.
- gerulus (Ball). Calif., Ore. 16- 42:304, 1910.
- spatulatus Ball. Calif. 55- 26:430, 1936.

FRISCANUS Ball. 9- 31:60, 1936

intricatus (Ball). Calif. 16- 43:198, 1911.

rupinatus (Ball). Calif. 16- 45:199, 1911.

DOLERANUS Ball. 9- 31:58, 1936

longulus (G. & B.) Pa., Tenn., Ia., Kans., Colo. 17- p. 97, 1895.

kinonanus Ball. Mex. 55- 26:432, 1936.

perspicillatus (Osborne & Ball). Ia., Tenn., Ohio. 35- 4:227, 1897.

var. rubralineus (DeL.) Fla. 54- 32:64, 1924.

atascusus Ball. Ariz. 55- 26:432, 1936.

graeculus (Ball). Colo. 16- 33:6, 1901.

ALLYGIANUS Ball. 9- 31:59, 1936

gutturosus (Ball). 16- 42:307, 1910.

clathratus Ball. Calif. 55- 26:431, 1936.

PASADENUS Ball. 9- 31:60, 1936

pasadenus (Ball). Calif. 16- 46:212, 1914.

chicanus Ball. Calif. 55- 26:431, 1936.

margaritae Ball. Calif. 55- 26:431, 1936.

limbatus (V.D.) Calif. 25- 6:92, 1890.

omani Ball. Calif. 74- 12:192, 1936.

deltus Ball. Calif. 74- 12:193, 1936.

BALLANA DeL. 69- 36:217, 1936

vastula (Ball). Calif. 16- 42:238, 1910.

verutus (V.D.) Calif. 82- 14:424, 1925.

delea DeL. Calif. 69- 37:105, 1937.

firma DeL. Calif. 69- 37:107, 1937.

filamenta DeL. Calif. 69- 37:108, 1937.

attenuata DeL. Calif. 69- 37:108, 1937.

prava DeL. Calif. 69- 37:107, 1937.

spinosa DeL. Ida. 69- 37:110, 1937.

- nigridens DeL. N. Mex. 69- 37:109, 1937.
- polica DeL. Ida. 69- 37:110, 1937.
- parallela DeL. Ida. 69- 37:110, 1937.
- quira DeL. Ariz. 69- 37:109, 1937.
- chrysothamna (DeL. & Dav.) Ida. 54- 42:222, 1934.
- coarcta DeL. Calif. 69- 37:113, 1937.
- vivata (Ball). Calif., Nev. 16- 42:302, 1910.
- transea DeL. Colo. 69- 37:106, 1937.
- adversa DeL. Utah. 69- 37:107, 1937.
- atridorsum (V.D.) Colo., S.D., Mont. 16- 26:92, 1894.
- visalia (Ball). Calif. 16- 42:301, 1910.
- curvidens DeL. Ida. 69- 37:111, 1937.
- sera DeL. Calif. 69- 37:113, 1937.
- venditaria (Ball). Utah, Nev., Ida. 16- 42:266, 1910.
- viriosa (Ball). Calif. 16- 42:266, 1910.
- chiragrica (Ball). Ariz. 16- 32:337, 1900.
- bullata (Ball). Calif. 16- 34:17, 1902.
- glomerosa (Ball). Colo. 16- 42:308, 1910.
- angula DeL. Ariz. 69- 37:116, 1937.
- gruis DeL. Calif. 69- 37:114, 1937.
- indens DeL. Calif. 69- 37:114, 1937.
- diutia DeL. Calif. 69- 37:115, 1937.
- hama DeL. Calif. 69- 37:115, 1937.
- recurvata DeL. Ida., Ore. 69- 37:117, 1937.
- valga DeL. Utah. 69- 37:116, 1937.
- mera DeL. Calif. 69- 37:109, 1937.
- hebea DeL. Utah, Nev. 69- 37:112, 1937.
- brevidens DeL. Ida. 69- 37:106, 1937.
- calcea DeL. Nev. 69- 37:106, 1937.

occidentalis DeL. Nev. 69- 37:112, 1937.
plena DeL. Calif. 69- 37:114, 1937.
vetula (Ball). Calif., Utah. 16- 42:302, 1910.
ortha DeL. Utah, Ida., Nev. 69- 37:111, 1937.
tiaja DeL. Mex. 69- 37:116, 1937.
elexa DeL. Calif. 69- 37:108, 1937.
calcara DeL. Nev. 69- 37:111, 1937.
absenta DeL. Nev., Utah. 69- 37:113, 1937.
languida (Ball). Calif. 16- 34:17, 1902.
pleura DeL. Calif. 69- 37:115, 1937.
vesca (Ball). Calif. 16- 42:302, 1910.
mana DeL. Calif. 69- 37:119, 1937.
seca DeL. Calif. 69- 37:118, 1937.
antlera DeL. Ida. 69- 37:120, 1937.
aris DeL. Utah, Ida. 69- 37:120, 1937.
velosa DeL. Ida. 69- 37:119, 1937.
vespertina (Ball). Calif. 16- 42:301, 1910.
dena DeL. Calif. 69- 37:120, 1937.
bifida DeL. Ida. 69- 37:117, 1937.
callida DeL. Calif. 69- 37:121, 1937.
titusi (Ball). Calif., Ore., Ida. 16- 42:267, 1910.
repa DeL. Ariz. 69- 37:122, 1937.
chelata DeL. Calif. 69- 37:121, 1937.
calipera DeL. Utah, Ida., Calif., Nev. 69- 37:121, 1937.
dira DeL. Ariz. 69- 37:118, 1937.
bicornis DeL. Utah, Ida., Calif. 69- 37:119, 1937.
cuna DeL. Calif. 69- 37:118, 1937.
latula DeL. Calif. 69- 37:122, 1937.
vapida (Ball). Calif. 16- 42:305, 1910.

paridens DeL. Calif. 69- 37:123, 1937.

latera DeL. Calif. 69- 37:123, 1937.

arma DeL. Ariz. 69- 37:123, 1937.

dissimilata (Ball). Calif. 16- 42:306, 1910.

ursinus (Ball). Ore. 16- 42:307, 1910.

THAMNOTETIK Zett. 120- Col. 292, 1840

simplex (H.-S.) Que., Me., N.H., N.Y., Mich., Colo., Wis. 38- 2:352, 1861.

chlamydatus (Prov.) 89- 2:339, 1890.

CYPERANA DeL. 69- 36:218, 1936

cyperacea (Osb.) N.Y., Pa., Ohio, Ill., Wis., Ia. 4- 10:91, 1917.

vittipennis (S. & DeL.) Wis. 4- 10:90, 1917.

straminea (S. & DeL.) Wis., N.Y., Pa. 4- 10:90, 1917.

melanogaster (Prov.) Eastern U.S., Me. to S.D., Que., Ont., N.C., Tenn.
66- 4:578, 1872.

ciliata (Osb.) Me., Wis., Neb., Ia., Colo., Ida., Calif. 85- 5:244, 1898.

wanakena Ball. N.Y., Mich. 74- 12:194, 1936.

smithi (V.D.) N.J., Conn., Pa., Ill., Ia., Wis. 16- 24:266, 1892.

var. pollicarius Ball. Calif. 74- 12:193, 1936.

decipiens (Prov!) Que., Me., N.Y., Utah, Br. Col., Wis., Pa., Colo., Ida.
Wash., Alta. 89- 3:285, 1890.

stylata DeL. Ida., Utah, Alta. 107- 18:230, 1937.

gesa DeL. Idaho, Calif. 107- 18:231, 1937.

eruca DeL. Ida., S.D., Calif. 107- 18:231, 1937.

montula DeL. Colo. 107- 18:232, 1937.

longiseta (V.D.) Colo., Calif., Ia. 16- 24:266, 1892.

PALUDA DeL. 107- 18:233, 1937.

placida (Osb.) Me., N.Y., Wis., Ida., N. Br. 95- 20:536, 1905.

mellus (S. & DeL.) 4- 10:91, 1917.

ELYMANA DeL. 69- 36:218, 1936

inornata (V.D.) S.D., Me. 109- 19:303, 1892.

acuma DeL. Tenn. 4- 29:637, 1936.

acrita DeL. Ill. 4- 29:637, 1936.

caduca DeL. Wis. 4- 29:638, 1936.

ovatina Ball. Ariz. 74- 12:195, 1936.

ritana DeL. 4- 29:638, 1936.

ARUNDANUS DeL. 28- 46:180, 1935

shermani (Ball). N.C. 16- 35:230, 1903.

marginellus DeL. Tenn., Ill. 23- 46:181, 1935.

crumbi (DeL.) Tenn. 106- 17:81, 1916.

flavotinctus (DeL.) Tenn. 106- 17:82, 1916.

arundineus (DeL.) Tenn., Ill. 109- 52:91, 1926.

proprius (DeL.) Tenn. 69- 18:238, 1918.

carolinus DeL. N.C. 23- 46:181, 1935.

latidens DeL. N.C. 28- 46:182, 1935.

texana (Osborne & Ball) Tex., La. 83- 7:92, 1898.

rubralineus DeL. S.C. 28- 46:181, 1935.

parvulus DeL. S.C., N.C. 28- 46:182, 1935.

nacreosus (Crumb.) Tenn., Ill. 4- 3:196, 1915.

GRAMINELLA DeL. 69- 36:218, 1936

pallidula (Osborne.) La. 85- 5:245, 1898.

oquawka DeL. Ill. 28- 48:51, 1937.

mohri DeL. Pa., Ill. 28- 48:50, 1937.

albovenosa (S. & DeL.) Fla. 84- 25:153, 1923.

floridana DeL. & M. Fla., S.C. 107- 18:625, 1937.

aureovittata (S. & DeL.) Fla., Ill., Mass. 75- 346:16, 1920.

plana (DeL.) Fla. 54- 32:65, 1924.

- bisignata (DeL.) Fla., Del. 84- 25:154, 1923.
virginiana (S. & DeL.) Vir. 84- 24:99, 1922.
fitchii (V.D.) Eastern and Ia., Kans. 25- 6:133, 1890.
nigrinota DeL. & M. Fla. 107- 18:628, 1937.
CALANA DeL. 69- 36:218, 1936
umbratica (Ball). Calif. 16- 42:309, 1910.
CHLOROTETRIX V.D. 90- 6:306, 1892
lineatus Osb. Guatemala. 71- 23:5, 1919.
minor DeL. Tex., Mex. 71- 23:6, 1919.
sordidus Brown. La., Miss. 56- 21:248, 1933.
tergatus Ph. Eastern and Ia., Wash. 37- p. 58, 1851.
melanotus DeL. Tenn. 106- 17:84, 1916.
fumidus S. & DeL. Pa., Tenn. 4- 12:237, 1919.
fuscus Brown. 56- 21:243, 1933
fallax S. & DeL. Fla. 84- 24:94, 1922.
latifrons S. & DeL. 84- 24:95, 1922.
necopinus V.D. Southeastern U.S. 16- 25:282, 1893.
divergens S. & DeL. Va. 84- 24:94, 1922.
durus Brown. Fla. 56- 21:242, 1933.
vittatus Osb. Guatemala. 70- 9:465, 1909.
capensis S. & DeL. Fla. 84- 24:95, 1922.
suturalis DeL. Tenn. 106- 17:85, 1916.
rugicollis Bail. Fla., N.J., Tex. 16- 35:230, 1903.
spatulatus Osb. & Ball. Ia., Colo., Neb., Ohio, Wis., Tenn., Fla.
85- 4:225, 1897.
limosus DeL. & Cart. Pa. 4- 19:506, 1926.
pallidus Brown. Tex. 56- 21:245, 1933.
occidentalis DeL. Ore. 71- 23:11, 1919.
unicolor (Ph.) Northern coast to coast. 37- p. 53, 1851.

- brevidus DeL. Ill. 28- 48:52, 1937.
obsenus DeL. Ill. 28- 48:52, 1937.
similis Del. Ore. 71- 23:14, 1919.
dozeri S. & DeL. Miss. 84- 24:93, 1922.
latus Brown. Fla. 56- 21:244, 1933.
viridius V.D. Mich., N.Y., to Fla. & west to Kans. 90- 6:309, 1892.
orbonatus (Ball). Fla., & east coast. 16- 35:249, 1903.
productus S. & DeL. 4- 12:236, 1919.
curvidens Osb. Guat., Hond. 71- 23:16, 1919.
lusorius Osb. & Ball. Ia., northeastern & Colo., Utah. 85- 4:226, 1897.
lobatus Osb. Guat. 71- 23:15, 1919.
scutellatus Osb. Tex. 71- 23:18, 1919.
serrata DeL. Tex. & Mex. 28- 48:54, 1937.
vividus Crumb. Tenn., Kans., Ohio, S.C. 4- 8:197, 1915.
lucidus (Bak.) Calif., Ariz., N. Mex. 90- 7:12 suppl, 1895.
delta Ball. 28- 27:205, 1916.
acus DeL. & Dav. 54- 42:223, 1934.
borealis S. & DeL. Wis. 4- 10:92, 1917.
angustus Brown. 56-21:241, 1933.
excultus S. & DeL. Fla., Jamaica. 84- 24:97, 1922.
bakeri S. & DeL. Brazil. 84- 24:97, 1922.
minimus Bak. Brazil, Fla, Haiti, Jamaica. 16- 30:220, 1898.
galbanatus V.D. Eastern & Ia., N.D., Mont. 90- 6:310, 1892.
floridanus DeL. Fla. 54- 32:66, 1924.
rubidus Brown. Fla. 56- 21:246, 1933.
convexus Brown. Miss. 56- 21:242, 1933.
vacunus Crumb. Tenn. 4- 8:196, 1915.

- distinctus DeL. Tenn. 71- 23:23, 1919.
- attenuatus Brown. Mo. 56- 21:241, 1933.
- sinuosus Brown. Miss. 56- 21:247, 1933.
- balli Osb. Ohio, Ia., Tenn. 85- 5:246, 1998.
- filamenta DeL. Ill. 28- 48:53, 1937.
- maculosus Brown. Ark., La. 56- 21:244, 1933.
- iridescens DeL. Tenn., Md. 106- 17:83, 86, 1916.
- rotundus Brown. Ark., Ala., Miss. 56- 21:246, 1933.
- tunicatus Ball. Kans., Fla., Tenn., Ark., Ia., N.C., Tex., Mo. 16-
32:340, 1900.
- stolatus Ball. Colo. 16- 32:341, 1900.
- nudatus Ball. Ia., Tenn. 16- 32:340, 1900.
- dentatus S. & DeL. D.C., Mo. 84- 25:154, 1923.
- emarginatus Eak. Brazil. 16- 30:219, 1898.
- breviceps Eak. Brazil. 16- 30:220, 1898.
- tethys V.D. Jamaica. 10- 8:71, 1907.
- JASSUS Fabr. 32- p. 85, 1803.
- olitorius Say. Eastern & Kans., Mo., Ariz. 50- 6:310, 1831.
- borealis Spangb. "Am. borealis". 102- 36:24, 1879.
- melanotus Spangb. Ga., Tenn. 102- 35:19, 1878.
- NEOCOELIDIA G. & B. 17- 31:103, 1895.
- tumidifrons G. & B. Me., N.J., Tenn., Fla., Ia., Colo., Tex. 17- p. 104,
1895.
- candida Ball. Colo. 28- 20:166, 1909.
- crovila Ball. Calif. 28- 27:206, 1916.
- lacipennis V.D. Calif. 25- 6:49, 1890.
- ramona Ball. Calif. 28- 27:206, 1916.
- reticulata Ball. Colo., Utah, Calif. 28- 20:167, 1909.
- pallida Bak. Ariz., Calif. 16- 30:290, 1898.
- lineata Bak. Colo., Calif., Ore. 16- 30:289, 1898.

compta Ball. N. Mex. 28- 20:167, 1909.

barretti Bak. Calif. 16- 30:291, 1898.

tripunctata Ball. Ariz. 28- 20:163, 1909.

obscura Bak. Tex., Ariz., Calif. 16- 30:299, 1898.

pentagona Ball. Ore. 28- 27:207, 1916.

triunata Ball. Utah. 28- 27:207, 1916.

pulchella Ball. Calif. 28- 20:168, 1909.

texana Oman. Tex. 53- 4:62, 1931.

beameri Oman. Tex. 53- 4:63, 1931.

fuscovittata Oman. Ariz. 53- 4:65, 1931.

penelineata Oman. Calif., Nev. 53- 4:66, 1931.

distincta Oman. Ariz., Tex. 53- 4:67, 1931.

PARACOELIDEA Bak. 16- 30:292, 1898

tuberculata Bak. Eastern U.S. 16- 30:292, 1898.

fusconeura Oman. Ariz. 53- 3:73, 1930.

teretis Beam. Ariz. 53- 9:31, 1936.

TINOBRAGMA V. D. 10- 5:214, 1894.

vittatus V.D. Va., N.C., Fla., Ia., Tex. 10- 5:214, 1894.

viridescens DeL. Tenn., Mich., Md., Ill., Mo. 100- 17:92, 1916.

pallidus Osb. Tex. 70- 11:261, 1910.

var. elegans Law. Tex. 4- 25:363, 1932.

invenustus Law. La. 4- 25:363, 1932.

BALDULUS Oman. 84- 36:79, 1934

montanus Oman. Ariz. 84- 36:79, 1934.

laredanus Oman. Tex. 84- 36:78, 1934.

DAVISONIA Dorst. 116- 271:4, 1937

major (Dorst). N.H., Pa., Tenn., Mo., Kans., Ia., Minn., Colo., Utah,
Manitoba. 53- 4:43, 1931.

delongi Dorst. Mass., N.Y., Pa., Md., Va., Ohio, Ill., Wis., Ia., N.Mex.,
Canada. 116- 271:6, 1937.

punctifrons (Fall.) N. Y. 33- p. 42, 1823.

var. repleta (Fieb.) N.Y. 96- p. 49, 1885.

snowi (Dorst). Wis., Neb., Kans., Mont., Colo. 53- 4:41, 1931.

SOMRONIUS Dorst. 116- 271:9, 1937

dahlbomi (Zett.) Colo., Utah, Calif., Que., Alta. 120- col. 297, 1840.

laetus (Uhl.) 14- 1:360, 1876. 3:473, 1877.

vanduzei (G. & B.) 17- 31:103, 1895.

clavatus (DeL. & Dav.) N.J., Ill. 54- 42:223, 1931.

arcuatus (G. & B.) Mass., Colo., Utah, Que., Ont., Br. Col., Alta., Sask.
17- 31:105, 1895.

MACROSTELES Fieb. 117- 16:504, 1833.

variatus (Fall.) Me., N.H., Conn., N.Y., N.J., Pa., Ohio, Wis., Kans.,
Tenn., Colo., N.Mex., Utah, Que., Man., Ont. 58-
27:34, 1806.

fumatus (H.-S.) 35- fasc. 153, 5, 1838.

lepidus (V.D.) N.Y., Ohio, Wis., Mo., Kans., Tenn. 16- 26:139, 1894.

binotatus (Sahl.) Me., Ill., Ont. 67- 12:242, 1871.

suffusa (Osborne) 63- 238:146, 1915.

ungae (Ash.) Me., Alaska. 44- 3:134, 1904.

borealis (Dorst). Wash., Br. Col. 53- 4:45, 1931.

osborni (Dorst). Alaska. 53- 4:45, 1931.

fascifrons (Stal.) Wash., Calif., Alaska. 105- 19:194, 1853.

warioni (Leth.) 13- 15:127, 1878.

divisus (Uhl.) From Me. to Calif., from Minn. to Tex. and in Alaska and
Canada. 14- 3:472, 1877.

sexnotata Fall. (N.A. records cited in error).

quadrilineatus Forb. 93- 4:33, 1834.

lineatifrons (Stal.) Que. and Alaska. 105- 19:195, 1853.

slossoni (V.D.) Me., N.H., N.Y., Pa., N.C., Ohio, Wis., Br. Col., Ont. and
Nova Scotia. 16- 25:231, 1833.

pallidus (Osborne) Me. 63- 238:146, 1915.

obsoletus (Dorst). Kans., Tex. 53- 4:42, 1931.

viridi-griseus (Edw.) Que., Labr. 27- 60:54, 1924.

wilburi Dorst. Kans. 116- 271:13, 1937.

potoria (Ball). Me., N.Y., Ia. 16- 33:346, 1900.

scriptus (DeL.) Fla. 54- 32:67, 1924.

BALCLUTHA Kirk. 26- 33:243, 1900

abdominalis (V.D.) Eastern & Colo., Calif., B.C. 16- 24:113, 1892.

arizona Dav. & DeL. Ariz. 84- 37:100, 1935.

impicta (V.D.) Eastern & Mo., Kans., Calif., Wash. 16- 24:113, 1892.

flava (Bak.) 16- 28:38, 1896.

medius (Bak.) 16- 28:38, 1896.

var. osborni V.D. Que., Ont., N.Y., Ill. 118- p. 75, 1916.

viridis Osb. 95- p. 541, 1905.

var. maculata Dav. & DeL. Wis., Tenn., Conn., Pa., D.C. 84- 37:101,
1935.

punctata (Thunb.) Eastern Mo., Colo., B.C. 103- 4:21, 1792.

confusa (G. & B.) 17- p. 104, 1895.

occidentalis (Bak.) Wash. 16- 28:41, 1896.

livingstoni Bak. Vanc. Isl. 16- 28:42, 1896.

manitou (G. & B.) Colo. 17- p. 105, 1895.

californica Dav. & DeL. Calif. 84- 37:102, 1935.

NESOSTELES Kirk. 46- 1:343, 1906.

neglectus (DeL. & Dav.) Throughout U.S. 69- 33:55, 1933.

var. pallidus (DeL. & Dav.) Southern U.S. 69- 33:56, 1933.

guajanae (DeL.) P. R. 52- 7:267, 1923.

minutus (Osb.) P. R. 52- 13:101, 1929.

rosaceus (Osb.) P. R. 52- 13:102, 1929.

bisinuatus (DeL.) Fla. 52- 7:236, 1923.

pallidus (Osb.) 4- 19:352, 1926.

bifurcatus (DeL. & Dav.) 69- 33:58, 1933.

- hyalina (Osb.) 4- 19:352, 1926.
areolata (Osb.) 8- 114:226, 1934.
tutuuilana (Osb.) 49- part II, p. 188, 1934.
calcarus (DeL. & Dav.) Fla. 69- 33:57, 1933.
floridanus (DeL. & Dav.) Fla. 69- 33:56, 1933.
marquesana Osb. 8- 114:265, 1934.
sandersi (Dav. & DeL.) Canal Zone. 54- 37:108, 1935.
virescens (Osb.) Fla., Cuba. 4- 19:351, 1926.
abbreviata (DeL. & Dav.) 69- 33:57, 1933.
lineatus Osb. Cuba, Canal Zone, Boliv. 3- 15:449, 1924.
flavidus Osb. 4- 19:351, 1926.
knulli (Dav. & DeL.) Tex. 84- 57:109, 1935.

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- PROTALEBRA Bak. 90- 8:402, 1899
brasiliensis Bak. Fla., Tex. 90- 8:405, 1899.
scriptozona V.D. Lower Calif. 82- 12:186, 1923.
ALEBRA Fieb. 36- p. 14, 1872
albostriella (Fall.) Eastern U.S. 33- p. 54, 1826.
var. pallida Walsh. Mass., N.Y., Ill., Mo., Kans. 77- 10:149, 1862.
var. tinctoria McA. Kans. 54- 34:143, 1926.
var. agresta McA. Md., Va. 54- 34:144, 1926.
var. albostriella (Fall.) Eastern U.S. 33- p. 54, 1826.
var. fulveola (H.-S.) N.Y., Md., D.C., Ill., Minn., Kans. 35- p. 114,
1839.
var. rubrafrons DeL. Tenn., Ill. 69- 18:240, 1918.
fumida Gill. Minn., Kans., Tenn., Ill. 86- 20:714, 1898.
binotata (Walsh.) Ill. 15- 9:315, 1864.
scopa McA. Kans. 54- 34:145, 1926.

bicincta DeL. Tenn., Ill., Miss. 69- 18:240, 1918.

eburnea DeL. Tenn. 69- 18:241, 1918.

DIKRANEUROIDEA Law. 9- 24:307, 1929

beameri Law. Tex. 9- 24:307, 1929.

DIKRANEURA Hardy. 114- 1:423, 1850

maculata Gill. La., Md., 86- 20:716, 1896.

celtidis Osb. 68- 14:344, 1928.

aegera Beam. Calif. 74- 12:7, 1936.

cockerellii Gill. Calif., Ariz., N.Mex., Utah. 90- 7:14, suppl. 1, 1896.

rubens Beam. Ariz. 16- 66:16, 1934.

santana Beam. Ariz. 74- 12:3, 1936.

pusilla Law. Tex. 16- 62:57, 1930.

cruentata Gill. Calif., Colo., B.C., Kan., Md., Me., N.Y., D.C., Tenn.,
Ohio. 86- 20:717, 1898.

kansiensis Law. 16- 62:38, 1930.

nevadensis Law. 16- 62:38, 1930.

mera McA. Md. 84- 26:76, 1924.

readionis Law. Ariz. 16- 62:39, 1930.

californica Law. Calif. 16- 62:35, 1930.

imbellis Law. 16- 62:37, 1930.

aurulenta Law. Tex. 16- 62:41, 1930.

sandersi Ball & DeL. Cen. Am. 4- 18:332, 1925.

marginella Bak. Fla., Canal Zone. 76- 27:160, 1925.

marginatus DeL. 54- 32:68, 1924.

kunzei Gill. Ariz., Tex. 36- 20:721, 1893.

elongata Ball & DeL. Calif. 4- 18:326, 1925.

luna DeL. & Cald. Calif. 84- 39:24, 1937.

serrata DeL. & Cald. Ariz. 84- 39:24, 1937.

abnormis (Walsh.) Kans., Mo., Ia., Ill., Ohio. 81- 9:316, 1864.

torta DeL. & Cald. Ariz. 84- 39:25, 1937.

- angustata Ball & DeL. Tenn., Tex., Kans., S.C. 4- 18:322, 1925.
- arizona DeL. & Cald. Ariz., Colo. 34- 39:26, 1937.
- rufula Gill. Calif. 86- 20:720, 1938.
- rubrala DeL. & Cald. Minn., Wis. 84- 39:26, 1937.
- carneola (Stal.) E.C., Ore., Calif., Mex. 105- 19:196, 1938.
- var. sitkana Ball & DeL. Alaska. 4- 18:330, 1925.
- var. shoshone DeL. & Cald. Ida. 34- 39:27, 1937.
- absenta DeL. & Cald. Ariz., E.C., Calif., Colo., Ida., Ore., Utah. 34-
39:28, 1937.
- rubica DeL. & Cald. Ariz. 84- 39:28, 1937.
- dubita DeL. & Cald. Colo. 84- 39:28, 1937.
- terminia DeL. & Cald. Ariz. 84- 39:29, 1937.
- arcta DeL. & Cald. Ariz. 84- 39:29, 1937.
- urbana Ball & DeL. Ia., Ill., Neb., Ohio. 4- 18:329, 1925.
- hungerfordi Law. Mich., Ont. 16- 62:39, 1930.
- robusta Law. Colo. 16- 62:41, 1930.
- mali Prov. Colo., Ia., Wis., Mich., N.Y., Conn., Ill., Ohio, Can. 39-
3:298, 1890.
- alta DeL. & Cald. Pa. 84- 39:31, 1937.
- sitka DeL. & Cald. Alaska. 84- 39:31, 1937.
- FORCIPATA DeL. & Cald. 4- 29:70, 1936
- loca DeL. & Cald. Eastern U.S., Canada. 4- 29:71, 1936.
- magna DeL. & Cald. Wyo. 4- 29:71, 1936.
- sicula DeL. & Cald. Ida., Wash., Ore. 4- 29:72, 1936.
- triquetra DeL. & Cald. Kan., S. D., Neb., Ia., Ill. 4- 29:72, 1936.
- ohioensis DeL. & Cald. Ohio, Ill. 4- 29:73, 1936.
- ancantha DeL. & Cald. Ill. 4- 29:73, 1936.
- acclina DeL. & Cald. Vt., N.Y., Pa., Minn., M.D., S.D. 4- 29:74, 1936.
- calipera DeL. & Cald. Pa., N.Y., Minn. 4- 29:74, 1936.
- ortha DeL. & Cald. Pa., Me. 4- 29:74, 1936.

ALCONEURA Ball & DeL. 4- 18:334, 1925

4-vittata (Gill.) Bahamas. 86- 20:723, 1898.

rotunda Ball & DeL. Ia., Kans. 4- 18, 336, 1925.

unipuncta (Gill.) Ore., Calif., Ariz., Miss., Ala., Fla. 86- 20:718, 1898.

tricolor (V.D.) Calif., N.Mex. 113- 2:56, 1914.

planata Ball & DeL. Utah. 4- 18:337, 1925.

fulminea Law. Tex. 9- 25:44, 1930.

quadrifaculata Law. Ariz. 9- 25:45, 1930.

dodonana Beam. Ariz. 16- 66:17, 1934.

balli Beam. Ariz. 16- 66:17, 1934.

EMPOASCA Walsh. 31- 9:315, 1864.

pergandei Gill. Mass., Conn., Pa., Colo. 86- 20:735, 1898.

simplex DeL. & Dav. Ida., Kans. 69- 35:37, 1935.

acodens DeL. Pa. 115- 231:16, 1931.

pectinata DeL. Utah, Ida. 115- 231:16, 1931.

trilobata DeL. Pa., Mass. 115- 231:17, 1931.

obrudens DeL. Ariz. 69- 32:393, 1932.

maligna Walsh. Mass., Ohio, Colo., Pa., Ida., S.D. 31- 9:317, 1865.

unicolor Gill. 86- 20:731, 1898.

denticula Gill. Colo. 86- 20:734, 1898.

atrolabes Gill. Mich., N.H., Colo., Mass., Pa., Ia., Wis. 86- 20:736, 1898.

unica Prov. Ala., Md., Pa., Va., Tenn. 89- 3:340, 1890.

splendida Gill. 86- 20:731, 1898.

rubrafacia DeL. Ariz. 69- 32:394, 1932.

obtusa Walsh. Colo., Ohio, Pa., Ill., Ala., D.C. 31- 9:316, 1865.

incisa Gill. 86- 20:735, 1898.

incida DeL. British Col. 115- 231:21, 1931.

- salicis Whe. D. C. 84- 39:148, 1937.
- patula DeL. Tenn., Pa., Me. 115- 231:22, 1931.
- var. magna Del. B. C. 115- 231:23, 1931.
- albolinea Gill. Kans., Ill. 86- 20:732, 1898.
- saluta DeL. Ariz. 115- 231:24, 1931.
- aureoviridis (Uhl.) Colo. 14- 3:474, 1877.
- var. hartzelli Bak. Calif., Colo. 76- 27:160, 1925.
- var. vittata Hart. Calif., Colo. 85- 30:99, 1923.
- sublactea V.D. Calif. 82- 7:302, 1917.
- smaragdula (Fall.) Colo., Mich., Pa. 33- p. 53, 1826.
- viridipes Curt. 18- p. 14, 1837.
- trifasciata Gill. Kans., Ill., Ia., Mo., Mass. 86- 20:726, 1898.
- digita DeL. Manitoba. 115- 231:26, 1931.
- copula DeL. Wis. 115- 231:27, 1931.
- livingstoni Gill. Wash., Colo., B.C. 86- 20:728, 1898.
- clypeata Gill. & Bak. Colo., Calif. 17- 31:108, 1895.
- var. annella Hart. S.D., Colo. 85- 30:104, 1923.
- adunca DeL. Colo. 115- 231:31, 1931.
- osborni Hart. Ohio, Tenn. 85- 30:104, 1923.
- nigra Gill. & Bak. Colo. 17- 31:108, 1895.
- var. typhlocyboides Gill. & Bak. Colo., Utah. 17- 31:110, 1895.
- robusta Gill. 86- 20:739, 1898.
- var. nigroscuta Gill. & Bak. Colo., Utah, Nev., B.C. 17- 31:108, 1895.
- var. pulchella Gill. & Bak. Colo. 17- 31:109, 1895.
- similis DeL. & Dav. Nev. 69- 35:37, 1935.
- aspersa Gill. & Bak. Colo., Utah, Calif. 17- 31:107, 1895.
- decora DeL. & Dav. Calif., Utah, Nev., N. Mex. 69- 35:33, 1935.
- medora DeL. N.D. 69- 32:397, 1932.

alboneura Gill. Kans., Calif., Miss., Ala., Ore., Va., D.C., Me. 86-
20:743, 1898.

tumida Gill. Colo. 86- 20:744, 1898.

falca DeL. & Dav. Calif. 69- 35:34, 1935.

bidens DeL. Ariz. 69- 32:397, 1932.

ponderosa DeL. & Dav. Calif. 69- 35:29, 1935.

coccinea (Fh.) N.Y., Pa., Mass., Md. 37- 4:63, 1851.

snowi Gill. N. Mex. 86- 20:741, 1898.

recurvata DeL. Tenn. 115- 231:38, 1931.

reflexa DeL. Ariz. 69- 32:396, 1932.

rubida DeL. Calif. 115- 231:39, 1931.

ruficeps V. D. Calif. 82- 7:304, 1917.

barbara Hart. Calif. 85- 30:107, 1923.

plebia DeL. & Dav. Fla., Ariz., Haiti. 69- 35:34, 1935.

bifurcata DeL. Wis., Pa., Fla., Miss., Md., Kans., Mass., Ala., D.C.,
N.J. 115- 231:40, 1931.

transversa V.D. Calif. 82- 7:303, 1917.

recta DeL. & Cald. Ohio. 4- 27:606, 1934.

ditata DeL. & Cald. Ohio. 4- 27:606, 1934.

vergena DeL. & Cald. Ohio, Ill. 4- 27:607, 1934.

birdii Godg. Ill., Colo., N.Y., Mass., B.C., N.H., Mo., Ohio. 28-
1:123, 1890.

infusca DeL. Ohio. 69- 32:398, 1932.

bicornis DeL. & Cald. Ohio. 4- 27:604, 1934.

spira DeL. & Cald. Ohio. 4- 27:605, 1934.

hama DeL. & Cald. Ohio. 4- 27:605, 1934.

lata DeL. & Cald. Ohio. 4- 27:606, 1934.

ratio DeL. & Dav. Wash. 69- 35:36, 1935.

curvata Poos. Va., Tenn. 84- 35:177, 1933.

diverta DeL. & Dav. Ariz. 69- 35:31, 1935.

pallidula DeL. Ariz. 115- 231:42, 1931.

hamata DeL. Calif. 115- 231:43, 1931.

var. albonota DeL. Calif. 115- 231:43, 1931.

filamenta DeL. Ore., Wash. 115- 231:43, 1931.

var. abbreviata DeL. Ore. 115- 231:44, 1931.

vincula DeL. Manitoba. 115- 231:44, 1931.

deluda DeL. Manitoba. 115- 231:46, 1931.

dilitara DeL. & Dav. N. Mex. 69- 35:36, 1935.

bitubera DeL. Ariz., Utah, Nev. 69- 32:395, 1932.

torqua DeL. & Dav. Miss., Ohio, Ill. 69- 35:35, 1935.

calcara DeL. Ariz. 69- 32:398, 1932.

venusta DeL. & Dav. Ohio. 69- 35:33, 1935.

calcea DeL. Ariz. 69- 32:395, 1932.

arta DeL. & Dav. Calif., Nev. 69- 35:32, 1935.

cerea DeL. Utah, Calif. 115- 231:46, 1931.

ellisae Whe. Va. 84- 39:148, 1937.

unca DeL. & Dav. Utah, Ariz. 69- 35:35, 1935.

fabae (Harris). Mass., Pa., Va., Mich., Ill., Ala., Ark., La., D.C., Fla.
45- p. 186, 1841.

mali LeB. 77- 13:330, 1853.

viridescens Walsh. 81- 9:316, 1865.

consobrina Walsh. 81- 9:316, 1865.

malefica (Walsh.) 81- 9:317, 1865.

albopicta (Forb.) 93- 13:181, 1884.

flavescens (Fabr.) American records cited in error.

convergens DeL. & Dav. Ohio, Can. 69- 35:30, 1935.

sativae Poos. Kans., La., Tenn., Va. 84- 35:174, 1933.

pallida Gill. N.C. 86- 20:741, 1898.

constricta DeL. & Dav. Ohio, Kans., Fla. 69- 35:31, 1935.

- abrupta DeL. Calif., Colo., Ariz., Tex., Ore. 115- 231:48, 1931.
distracta DeL. & Cald. Ohio. 4- 27:607, 1934.
pyramidata DeL. & Cald. Ohio. 4- 27:608, 1934.
erigeron DeL. Tenn., D.C., Ohio. 115- 231:48, 1931.
dentata DeL. & Dav. Kans. 69- 35:30, 1935.
arida DeL. Utah, Calif. 115- 231:49, 1931.
batatae Poos. Fla. 84- 35:176, 1932.
solana DeL. La. 115- 231:50, 1931.
delongi Poos. Va. 84- 35:175, 1932.
panda DeL. B. C. 115- 231:51, 1931.
junipera DeL. Tenn. 115- 231:51, 1931.
occidentalis DeL. & Dav. Ida., Calif., Utah, Colo., N.Mex. 69- 35:32, 1935.
elongata DeL. Wash., Calif., Utah. 115- 231:53, 1931.
rufa DeL. Calif. 115- 231:53, 1931.
tinctoria DeL. Utah. 115- 231:54, 1931.
morrisoni Hart. Calif. 85- 30:107, 1923.
radiata Gill. Colo., Tex., D.C., Tenn. 86- 20:738, 1898.
mexicana Gill. Tex. 86- 20:738, 1898.
 IDONA DeL. 115- 231:50, 1931
minuenda (Ball.) Fla. 80- 34:23, 1921.
 var. moznettei (Ball.) Fla. 80- 34:23, 1921.
 var. clavigerana (Ball.) Fla. 80- 34:23, 1921.
 JORUMA McA. 39- 8:34, 1925
pisca McA. Md. 39- 8:34, 1925.
minuta Law. Tex. 74- 6:136, 1930.
 TYPHLOCYBA Germ. 100- 1:180, 1833
ulmi Linn. Mass., Ont., Mo., B.C., Calif. 61- p. 243, 1761.
tenerrima H.-S. Reported for northeastern N.A. 35- 164, 16:124, 1834.
piscator McA. Ill., Ia. 86- 68:7, 1926.

- unca McA. N.H., Ia., N.Y., Va. 86- 68:8, 1926.
- surda DeL. & Johns. Pa. 28- 47:101, 1936.
- persephone McA. Ia. 86- 68:11, 1926.
- commissuralis Stal. Wash., Calif., B.C., Ida., Colo. 109- 19:196, 1858.
- euphrante McA. Utah. 86- 68:12, 1926.
- ariste McA. N. Mex. 86- 68:13, 1926.
- rosae (Linn.) Mass., N.Y., Pa., Ohio, Wis., Ill., Utah, B.C., Wash., Calif.
60- Ed. 10, 1:439, 1758.
- xanthippe McA. N.Y., Mass., Ohio. 86- 68:14, 1926.
- enascora DeL. & Johns. Ida. 28- 47:103, 1936.
- ariadne McA. B. C. 86- 68:14, 1926.
- expanda DeL. & Johns. Colo. 28- 47:104, 1936.
- lethierryi Edw. Mass. 27- 17:224, 1881.
- duplicata McA. Ont. 86- 68:16, 1926.
- flavomarginata G. & B. Utah, Colo., N. Mex. 17- p. 111, 1895.
- tunicarubra Gill. N.Y., Mich., Wis., Ohio, Kans. 86- 20:752, 1898.
- lancifer McA. Mass., Ill. 86- 68:19, 1926.
- aureotecta (S. & DeL.) Wis., Ia., Pa. 4- 10:93, 1917.
- niobe McA. 86- 68:20, 1926.
- rubriocellata Malloch. Ill. 9- 15:48, 1920.
- cymba McA. Nova Scotia, Wis., N.Y., Mich., Ont., N.H., Miss. 16- 50:360,
1918.
- gillettei (V.D.) N.Y., D.C., Ill., Ia., Kans., Wis., N.H., Neb., Colo.
16- 40:160, 1908.
- var. volans McA. 16- 51:225, 1919.
- pomaria McA. Eastern and Colo., Kans., Ark. 86- 68:29, 1926.
- crassa DeL. & John. Pa. 28- 47:102, 1936.
- pruni DeL. & Dav. Ida., Ore. 69- 34:161, 1934.
- surcula DeL. & John. Wis. 28- 47:103, 1936.
- athene McA. Ill. 86- 68:31, 1926.

arsinoe McA. Mass. 86- 68:31, 1926.
andromache McA. N.Y. 86- 68:32, 1926.
melite McA. Colo., N.Y. 86- 68:32, 1926.
nitidula (Fabr.) N.H., Europe. 30- 4:46, 1794.
modesta Gibs. Mo., Va., La., Ill., Ia. 16- 49:184, 1917.
6-notata V.D. Calif. 113- 2:57, 1914.
phryne McA. Ill., Ia. 86- 68:34, 1926.
antigone McA. Ill., Va. 86- 68:35, 1926.
nicarete McA. Ill., Va., N.Y. 86- 68:36, 1926.
clymene McA. N.Y. 86- 68:36, 1926.
danae McA. N.Y., Va. 86- 68:37, 1926.
quadrata DeL. & John. Pa. 28- 47:103, 1936.
eurydice McA. Md. 86- 68:37, 1926.
berenice McA. D.C., Ont. 86- 68:38, 1926.
hermione McA. D.C., Va., Wis. 86- 68:38, 1926.
appendiculata Mall. Ill., Ia., D.C. 16- 52:95, 1920.
minutus DeL. Fla. 54- 32:68, 1924.
dorsti Ossian. Utah. 29- 57:10, 1936.

EUPTERYX Curt. 27- 1:192, 1833

melissae Curt. N.Y., Calif., Ohio., Mass., Conn., Pa. 18- 14:2, 1837.
collina Flor. 38- 2:433, 1861.
quinquemaculata Bak. 48- 1:8, 1903.
artemisiae Kirshb. Mass. 124- 31:190, 1868.
vanduzei Gill. N.Y., Pa. 86- 20:748, 1898.
nigra Osb. Me., N.Y., Pa. 95- p. 543, 1905.
flavoscuta Gill. N.H., N.Y., N.J., Pa., Fla., Ohio. 86- 20:749, 1898.
huachucae Law. Ariz. 74- 6:135, 1930.
concinna Germ. Mass. 42- p. 14, 1834.

stellulata Burm. N.Y. 15- p. 16, 1838.

inscripta S. & DeL. 84- 24:99, 1922.

HYMETTA McA. 80- 32:121, 1919.

trifasciata (Say). Mo. 50- 4:543, 1825.

var. albata McA. Md., N.C. 80- 32:121, 1919.

distincta Fair. Kans. 53- 1:87, 1928.

arizoniana Fair. Ariz. 53- 1:90, 1928.

kansasensis Fair. Kans. 53- 1:90, 1928.

balteata (Mc.A.) Md., Va., D.C., Kans., Tex. 80- 32:121, 1919.

var. mediana Fair. Kans. 53- 1:89, 1928.

var. anthisma (McA.) Tex., Md. 53- 1:89, 1928.

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vulnerata Fh. Canada & U.S. 37- p. 62, 1851.

var. fulmina McA. Md., Kans. 109- 46:274, 1920.

var. decora McA. Md. 109- 46:274, 1920.

niger Gill. N.Y., Conn., Md., Va., Tenn., Ill., Ia., Neb., Kans., Colo.
86- 20:765, 1898.

var. nigerrima McA. Md., Va., Ill., Ia., Kans., Colo. 109- 46:275,
1920.

atra Johns. Ohio. 68- 31:96, 1935.

atrata Johns. Ohio. 68- 31:97, 1935.

bicolorata Beam. Kans., Pa., Ill. 53- 10:11, 1937.

variabilis Beam. Ariz. 4- 22:126, 1929.

hubbardi McA. Ariz. 39- 8:35, 1924.

gradata Rob. Kans., Colo. 16- 56:58, 1924.

pulchella Rob. Kans. 16- 56 : 155, 1924.

Obliqua Group

caerula Beam. Ark. 53- 10:10, 1937.

mixta Beam. Fla. 74- 8:183, 1932.

- rubroscuta (Gill.) Kans., Ohio, Ill. 86- 20:755, 1898.
- crevecoeuri (Gill.) Kans., N.Y., Conn., Ohio, N.C. 86- 20:767, 1898.
- bitincta McA. Kans., Ill. 12- 14:130, 1926.
- bifurca Beam. Ill., Kans. 4- 23:422, 1930.
- accurata Beam. Tenn. 16- 66:18, 1934.
- pulchra Beam. 4- 23:422, 1930.
- electa McA. Va., Ill., Kans. 109- 46:282, 1920.
- fumida (Gill.) Kans., Conn., Md., Va., Ind., Ill., Calif. 86- 20:758, 1898.
- atrimucronata Beam. Ill. 4- 23:424, 1930.
- kanza Rob. Kans., Neb. 16- 56:58, 1924.
- varia McA. Va. 109- 46:287, 1920.
- clavata DeL. Kans., Tenn., Ill. 106- 17:105, 1916.
- torra Rob. 16- 56:155, 1924.
- brundusa Rob. Kans. 16- 56:158, 1924.
- iconica McA. Va., Md. 109- 46:287, 1920.
- inornata McA. Ariz., Colo. 80- 37:132, 1924.
- abolla McA. Va., Md., Ill., Kans., Calif. 109- 46:285, 1920.
- var. accensa McA. Ark. 108- 46:288, 1920.
- var. lemmisca McA. Ill. 12- 16:131, 1926.
- vinaria Beam. Kans. 4- 23:426, 1930.
- lawsoniana Bak. Kans., Ont., Conn., Md., Va., N.C., Tenn., Mo., Ill., Minn.,
 Neb., Calif. 76- 28:347, 1926.
- lawsoni Bak. 76- 27:537, 1925.
- dorsalis Gill. 86- 20:757, 1898.
- penelutea Beam. Kans. 4- 23:427, 1930.
- divisa McA. Md. 39- 8:37, 1924.
- tenaria V.D. Calif. 82- 13:232, 1924.
- tecta McA. Ohio. 109- 46:288, 1920.
- sexpunctata Mall. 9- 16:27, 1920.
- var. carbonata McA. Md., Va., Mass., N.H. 109- 46:289, 1920.

- mallochi McA. Ill. 12- 15:41, 1924.
repetita McA. Ill. 12- 16:131, 1926.
nicholi Beam. Ariz. 16- 59:30, 1927.
canyonensis Beam. Ariz. 4- 22:120, 1929.
bipentagona Beam. Kans. 16- 59:32, 1927.
juncea Beam. Fla. 53- 10:10, 1937.
rufostigmata Beam. Ark. 4- 23:429, 1930.
 var. subnubila Beam. Ill., Kans. 4- 23:429, 1930.
oculata McA. Tex. 12- 15:40, 1924.
quadricornis Beam. Tex. 4- 23:431, 1930.
huachucana Beam. Ariz. 54- 42:237, 1934.
davisii Beam. Nev. 53- 7:96, 1934.
arida Beam. N. Mex. 4- 30:31, 1937.
apacha Bak. 76- 27:537, 1925.
 bipunctata Gill. 86- p. 251, 1898.
 balli Beam. 50- 5:125, 1932.
abluta McA. Calif. 80- 37:132, 1924.
ceonathana Beam. Ariz. 54- 42:287, 1934.
falcata Beam. Ill. 4- 23:432, 1930.
harpax Beam. Tenn., D.C. 4- 23:432, 1930.
cotidiana Beam. Okla., Md. 4- 23:433, 1930.
cuneata Beam. Okla. 4- 23:433, 1930.
diffisa Beam. Kans., Tenn., Okla. 4- 23:434, 1930.
torra Rob. Kans. 16- 56:155, 1924.
quadrata Beam. Ill., Kans. 4- 23:435, 1930.
parvispicata Beam. Ark., Okla. 4- 23:435, 1930.
cauta Beam. La., D.C. 53- 8:100, 1935.
coarctata Beam. Kans. 4- 23:436, 1930.

- aenea Beam. Kans., Tenn. 4- 23:436, 1930.
- torva Beam. Conn., Md., D.C. 53- 8:98, 1935.
- gleditsia Beam. Okla. 4- 23:437, 1930.
- xanthocephala Rob. Kans. 16- 56:220, 1924.
- fulvocephala Rob. 16- 56:155, 1924.
- crataegi Johns. Ohio. 68- 31:61, 1935.
- penenoeva Beam. Kans. 4- 23:438, 1930.
- aspera Beam. & Griff. Ida., Ore., Wash., B.C. 53- 8:18, 1935.
- dolosa Beam. & Griff. Ore., Wash., B.C. 53- 8:19, 1935.
- var. occidua Beam. & Griff. Calif. 53- 8:19, 1935.
- var. interjecta Beam. & Griff. Calif. 53- 8:20, 1935.
- noevus (Gill.) Ont., Conn., Md., Ind., Ill., Tenn., Kans., Neb., Colo.,
 Calif. 86- 20:757, 1898.
- obvia Beam. Kans., Ark., Okla., Tenn. 4- 23:439, 1930.
- rubens Beam. Ill. 4- 23:439, 1930.
- rubrataeniensis Beam. Ill., Kans. 4- 23:440, 1930.
- sagittata Beam. Ill. 4- 23:440, 1930.
- funesta Beam. Ill. 4- 23:441, 1930.
- plena Beam. Ill., Kans. 4- 23:442, 1930.
- stolata McA. Kans. 109- 46:279, 1920.
- albescens Beam. Ill., Kans. 4- 23:443, 1930.
- cruciformis Beam. Ill., Kans. 4- 23:443, 1930.
- mansueta Beam. La., Ill., Miss. 53- 8:98, 1935.
- spatulata Beam. Ill. 4- 23:444, 1930.
- tenuispica Beam. Kans. 4- 23:444, 1930.
- volucris Beam. Ill., Kans., Ark. 4- 23:445, 1930.
- eluta McA. Ill. 109- 46:277, 1920.
- hamata Beam. Ill., Md. 4- 23:446, 1930.
- infinita Beam. Kans., Tenn. 4- 23:446, 1930.

- angularis Beam. Kans. 4- 23:447, 1930.
- latapex Beam. Kans., Tenn. 4- 23:447, 1930.
- modica Beam. Ill., Tex. 4- 23:448, 1930.
- scissa Beam. Ill., Ark. 4- 23:448, 1930.
- idonea Beam. Ark. 53- 8:100, 1935.
- nava Beam. Ill., La., D.C. 53- 8:102, 1935.
- apta Beam. La., Ark. 53- 8:102, 1935.
- nitida Beam. N.H. 53- 8:103, 1935.
- cornipes Beam. Kans., Okla. 4- 23:449, 1930.
- insigna Beam. & Griff. B.C., Mont., D.C. 53- 8:17, 1935.
- malleiformis Beam. Ill., Kans. 4- 23:449, 1930.
- tridens Beam. Ill., Kans., Md. 4- 23:450, 1930.
- bicornis Beam. Ill., Md. 4- 23:450, 1930.
- spearca Aut. & Johns. Ga. 4- 29:813, 1936.
- nitida Aut. & Johns. 4- 29:65, 1936.
- obliqua (Say). U.S. & Can. 50- 4:342, 1825.
- var. amabilis McA. Md. 80- 37:132, 1924.
- var. pelta McA. Md. 109- 46:278, 1920.
- var. parma McA. Kans. 109- 46:280, 1920.
- jocosa Beam. Kans., La., Mo. 53- 8:101, 1935.
- magnacalx Beam. Ill., Kans. 4- 23:451, 1930.
- perita Beam. Kans., Md., D.C. 53- 8:99, 1935.
- furcellata Beam. La., Tex. 4- 23:452, 1930.
- unicuspidis Beam. Ill., Kans. 4- 23:452, 1930.
- afflicta Beam. Md. 53- 8:101, 1935.
- penobliqua Beam. Ill. 4- 23:453, 1930.
- aucta McA. Calif. 55- 5:123, 1932.
- ales Beam. Utah, Ariz. 53- 5:124, 1932.
- acicularis Beam. Ore. & B.C. 53- 5:126, 1932.

merita Beam. Calif. 53- 5:127, 1932 .
dowellii Beam. Kans., Ark. 53- 5:62, 1932.
inclita Beam. Calif. 74- 10:44, 1934.
dentata Gill. Calif. 86- 20:765, 1898.
biocularis V.D. Calif. 82- 13:233, 1924.
rubricata V.D. Fla. 10- 9:229, 1909.
caldwellii Johns. Ohio, Tenn. 68- 31:69, 1935.
auteni Johns. Ohio, Pa. 68- 31:73, 1935.
repleta Johns. Ohio, Ill., Pa. 68- 31:78, 1935.
stylata Johns. Ohio, Ga. 68- 31:78, 1935.
sinua Johns. Ohio. 68- 31:82, 1935.
ador McA. Nova Scotia. 16- 50:361, 1919.
sincera Johns. Ohio, Ill. 68- 31:94, 1935.
fragilis Johns. Ohio, Ill. 68- 31:93, 1935.
minuta Johns. Ohio. 68- 31:93, 1935.
minima Johns. Ohio. 68- 31:92, 1935.
rubrotincta Johns. Ohio, Ill. 68- 31:91, 1935.
inconspicua Johns. Ohio. 68- 31:90, 1935.
complicata Johns. Ohio. 68- 31:87, 1935.
intricata Johns. Ohio. 68- 31:86, 1935.
gargantua Johns. Ohio. 68- 31:81, 1935.
alternata Johns. Ohio, Ill. 68- 31:72, 1935.
cavena Aut. & Johns. Ga. 4- 29:61, 1936.
scytha Aut. & Johns. Ga. 4- 29:61, 1936.
contrastata Aut. & Johns. Ga. 4- 29:62, 1936.
ponderosa Aut. & Johns. Ga. 4- 29:62, 1936.
decorata Aut. & Johns. Ga. 4- 29:63, 1936.
extrema Aut. & Johns. Ga. 4- 29:64, 1936.

stulta Aut. & Johns. Ga. 4- 29:64, 1936.
nondescripta Johns. Ohio. 68- 31:92, 1935.
celebrata Johns. Ohio. 68- 31:82, 1935.
erosa McA. Calif. 39- 8:36, 1924.
pallenta Beam. Ariz. 4- 22:117, 1929.
obscura Beam. Ariz. 4- 22:117, 1929.
triceroprocta Beam. Tex. 4- 22:118, 1929.
cimarroni Beam. N. Mex. 4- 22:119, 1929.
cornigera Beam. Calif. 4- 30:31, 1937.
casta Beam. Ariz. 4- 22:118, 1929.
rubricunda Beam. Ariz. 4- 22:126, 1929.
grandis Beam. Ariz. 4- 22:127, 1929.
milleri Beam. Tex., Ariz. 4- 22:125, 1929.
tricolor Beam. Ariz. 4- 22:124, 1929.
kiperi Beam. Ariz., N. Mex. 4- 22:124, 1929.
unicolor Beam. Tex. 4- 22:120, 1929.
pinalensis Beam. Ariz. 4- 22:119, 1929.
utahna Beam. Utah. 4- 30:32, 1937.
tripunctata Beam. Ariz., Tex. 4- 22:119, 1929.
aprica McA. Ariz. 80- 42:132, 1924.
ritana Beam. Ariz. 54- 42:286, 1934.

Maculata Group

maculata (Gill.) Kans. 86- 20:764, 1898.
gillettei Beam. Ill. 16- 63:128, 1931.

- noncuspidus Beam. Ill. 16- 63:129, 1931.
- stephensoni Beam. Ill., Tex., Okla. 16- 63:130, 1931.
- lunata McA. Ill., Tex., Okla. 12- 15:41, 1925.
- contracta Beam. Ill., Kans., Tenn. 16- 63:130, 1931.
- gemina McA. Va. 109- 46:267, 1920.
- curvata Beam. Ill., Kans., Minn. 16- 63:132, 1931.
- impar Beam. Ill., Kans. 16- 63:133, 1931.
- brevipes Beam. Okla. 16- 63:133, 1931.
- nigriventer Beam. Ill. 16- 63:134, 1931.
- bifida Beam. La. 16- 63:134, 1931.
- spinifera Beam. Ill., Kans. 16- 63:240, 1931.
- triangulata Beam. Ill., La. 16- 63:240, 1931.
- bispinosa Beam. Ill., Kans., Md., Tex., Tenn. 16- 63:241, 1931.
- calamitosa Beam. Ill., Kans., Ark., Tenn. 16- 63:241, 1931.
- uncinata Beam. Ill., Kans. 16- 63:242, 1931.
- parvipes Beam. Kans., Tenn. 16- 63:242, 1931.
- turgida Beam. Ill., Kans. 16- 63:245, 1931.
- parallela McA. Mass. 16- 63:245, 1931.
- teres Beam. Ill., Tenn. 16- 63:263, 1931.
- clavipes Beam. Kans., Tenn., Ark. 16- 63:269, 1931.
- penesica Beam. Kans., Md., Ga., Ark., D.C. 16- 63:269, 1931.
- rostrata Beam. Kans., Ia., Ind. 16- 63:270, 1931.
- tantilla Beam. Ill., Kans., Ia. 16- 63:285, 1931.
- interna Beam. Kans., Fla. 16- 63:285, 1931.
- dira Beam. Ill., Md., Kans., Ia., Okla., Ark. 16- 63:286, 1931.

- concosa Beam. Kans., Ia. 16- 63:286, 1931.
- mensa Beam. Ill., Kans., Ia. 16- 63:287, 1931.
- arta Beam. Ill. 16- 63:287, 1931.
- rotunda Beam. Ill., Tenn., Md. 16- 63:288, 1931.
- abjecta Beam. Ill. 16- 63:288, 1931.
- externa Beam. Kans. 16- 63:289, 1931.
- separata Beam. Ill., Ia., Kans. 16- 64:12, 1932.
- firma Beam. Ill., Kans., Md. 16- 64:12, 1932.
- propria Beam. Kans., Fla. 16- 64:13, 1932.
- dumosa Beam. Ill., Okla., Ark., Ia. 16- 64:13, 1932.
- solita Beam. Ill. 16- 64:14, 1932.
- usitata Beam. Ill., Md., D.C. 16- 64:14, 1932.
- macra Beam. Ill., Md. 16- 64:15, 1932.
- sancta Beam. Ill. 16- 64:15, 1932.
- incondita Beam. Ill. 16- 64:16, 1932.
- immota Beam. Tex. 16- 64:16, 1932.
- mira Beam. Ill., D.C., Md., Va., Ark., Ia., N.C., 16- 64:45, 1932.
- restricta Beam. Ia., Ark., Md. 16- 64:45, 1932.
- aesculi Beam. Miss. 16- 64:46, 1932.
- adunca Beam. D.C., Kans., Md., N.C. 16- 64:46, 1932.
- linea Beam. Kans. 16- 64:47, 1932.
- opulenta Beam. Fla. 16- 64:48, 1932.
- retusa Beam. Fla. 16- 64:48, 1932.
- ungulata Beam. La., Tex. 16- 64:69, 1932.
- parva Beam. La., Fla., Md. 16- 64:70, 1932.
- facata Beam. Fla. 16- 64:70, 1932.
- consucta Beam. Kans., D.C., Md., Ark. 16- 64:71, 1932.
- zioni Beam. Utah. 16- 64:71, 1932.
- nevadensis Beam. Nev. 16- 64:72, 1932.

- forfex Beam. Ark., Md., N.C. 16- 64:82, 1932.
- lenta Beam. Ill., Kans., La., Md. 16- 64:82, 1932.
- unica Beam. Ia., Ark., D.C., Md. 16- 64:83, 1932.
- manus Beam. Kans., Ill., Ia., N.C., Md., Va. 16- 64:83, 1932.
- minor Beam. Ia., Ohio. 16- 64:84, 1932.
- ballista Beam. Ill., Ark., Md. 16- 64:84, 1932.
- penerostrata Beam. Ark., Tex. 16- 64:85, 1932.
- crinita Beam. Ark., Va. 16- 64:85, 1932.
- andersoni Beam. Ark., Kans. 16- 64:86, 1932.
- curta Beam. Ia., Md. 16- 64:86, 1932.
- lata Beam. Md., Va., Ark., S.C. 16- 64:86, 1934.
- knighti Beam. Ia. 16- 64:87, 1932.
- septima Beam. Kans. 16- 64:87, 1932.
- pyra McA. Ia. 16- 64:88, 1932.
- confirmata McA. Va. 16- 64:134, 1932.
- mitella McA. 12- 16:132, 1926.
- rubranotata Beam. Kans. 16- 59:30, 1927.
- accola McA. 109- 46:299, 1920. Md.
- osborni (DeL.) Ill., Tenn., Ohio, Ark. 106-17:103, 1916.
- var. dulcis McA. Md. 109- 46:296, 1920.
- bella McA. Md. 109- 46:300, 1920.
- univittata Rob. Kans. 16- 56:156, 1924.
- trivittata Rob. Kans. 16- 56:59, 1924.
- texana Beam. Tex. 4- 22:116, 1929.
- torella Rob. Kans. 16- 56:156, 1924.
- rosa Rob. Ohio. 16- 56:58, 1924.
- kansana Bak. Kans., Conn., Md., Va., Tenn., Ohio, Mo. 76- 27:537, 1926.
- scutellaris Gill. 86- 20:764, 1898.

- var. *ardens* McA. Md. 109- 46:209, 1920.
- var. *insolita* McA. Ill. 12- 16:133, 1926.
- era* McA. Va. 109- 46:267, 1922.
- rubraza* Rob. Kans. 16- 56:291, 1924.
- morgani* (DeL.) Tenn. 106- 17:104, 1916.
- lawsoni* Rob. Kans., Ark., Tex., Ia., Okla., Ill., Md., D.C. 16- 56:59,
1924.
- mediana* Rob. 16- 56:156, 1924.
- ligata* McA. Ill., Kans., D.C. 109- 46:301, 1920.
- var. *pupillata* McA. Ill. 12- 15:42, 1924.
- var. *caestra* McA. Calif. 80- 37:133, 1924.
- allecta* McA. D.C. 109- 46:302, 1920.
- illinoiensis* (Gill.) Ill. 86- 20:758, 1898.
- var. *regalis* Beam. Ariz. 4- 22:125, 1929.
- var. *spectra* McA. 109- 46:292, 1920.
- hartii* (Gill.) Ill., Ohio, Va., N.Y., Conn., Md., N.C., Tenn., Ind.
Mich., Miss., Kans. 86- 20:754, 1898.
- hymac* Rob. Kans. 16- 56:60, 1924.
- lusoria* V.D. Calif. 82- 13:234, 1924.
- tergemina* V.D. Calif. 82- 13:235, 1924.
- simplex* Knull & Aut. Ga. 4- 30:575, 1937.
- ventura* Knull & Aut. Ga. 4- 30:577, 1937.
- vittata* Knull & Aut. Ga. 4- 30:577, 1937.
- hyalina* Knull & Aut. Ga. 4- 30:575, 1937.
- distincta* Knull & Aut. Ga. 4- 30:572, 1937.
- delongi* Knull & Aut. Ga. 4- 30:574, 1937.
- continua* Knull & Aut. Ga. 4- 30:578, 1937.
- compressa* Knull & Aut. Ga. 4- 30:573, 1937.
- pallida* Knull & Aut. Ga. 4- 30:573, 1937.

carmini Beam. Kans., Ariz., N.Mex., Ill., Ia., D.C., S.C., Ind., Ia.,
Okla., Colo., Utah. 4- 22:121, 1929.

campana Rob. Ont., N.Y., Ark., Kans., Neb. 16- 56:59, 1924.

basilaris (Say). Kans., Ont., N.Y., Conn., Va., Tenn., Ohio, Ill.,
Wis., Ia., Neb. 50- 4:345, 1825.

affinis Fh. Kans. 37- p. 63, 1851.

bigemina McA. Tenn. 109- 46:300, 1920.

apicalis (DeL.) 106- 17:108, 1916.

californica Beam. Calif. 16- 64:143, 1932.

coryli V.D. 82- 13:234, 1924.

omani Beam. Kans., Ark. 53- 3:49, 1930.

misera Beam. Ill., Md. 16- 64:158, 1932.

certa Beam. Ill., Kans. 16- 64:159, 1932.

mirifica Beam. Ill., Md., Ia., Okla., Ark. 16- 64:159, 1932.

ingrata Beam. Ill., Ark., Okla. 16- 64:160, 1932.

marra Beam. D.C. 16- 64:160, 1932.

aculeata Beam. Ia. 16- 64:161, 1932.

clara Beam. Ill., Kans., Ark., Md. 16- 64:161, 1932.

inepta Beam. Ill., Kans., Ia., Md., Okla. 16- 64:162, 1932.

Comes Group

comes (Say). United States. 50- 4:343, 1825.

var. octonotata Walsh. Ont., N.Y., Md., Miss., Mich., Ill., Kans.,
Calif. 77- 9:318, 1864.

var. compta McA. Ont., Md., Va., Ala., Miss., Mich., Ind., Ill., Kans.
109- 46:267, 1920.

var. delicata McA. Md. 109- 46:317, 1920.

var. venusta McA. Md. 109- 46:319, 1920.

var. bidens McA. Va. 39- 8:39, 1924.

var. pontifex McA. Ill. 12- 16:136, 1926.

var. nudata McA. Md. 109- 46:316, 1920.

- var. *suffusa* McA. Md. 39- 8:39, 1924.
- var. *accepta* McA. Va., Md. 109- 46:318, 1920.
- vitifex* Fh. Ont., N.Y., Va., Mich., Ind., Ill., Wis., Ia., Kans., Tex.
N. Mex. 112- 21:392, 1856.
- palimpsesta* McA. Ill. 12- 15:43, 1924.
- coloradensis* Gill. Ill., Neb., Colo., N.Mex., Calif. 17- 19:16, 1892.
- ziczac* Walsh. Ont., Md., Mich., Ill., Miss., Ia., Neb., Kans., Colo.,
Calif. 77- 10:149, 1862.
- rubra* Gill. Md., Va., S.C., Tenn., Ill., Ia., Kans. 36- 20:764, 1898.
- aclys* McA. Conn., N.J., Md., S.C., Tenn., Ill., Mo., Kans., Neb. 109-
46:290, 1920.
- prosata* Johns. Ohio. 68- 31:108, 1935.
- infuscata* (Gill.) Md., Miss., Ill., Kans. 86- 20:764, 1898.
- ontari* Rob. Ont. 16- 56:60, 1924.
- amanda* McA. Mo., Kans. 109- 46:319, 1920.
- rubranotum* Rob. Kans. 16- 56:60, 1924.
- elegans* McA. Ont., Pa., Md., Miss., Ark., Ind., Ill., Ia., Neb., Kans.,
Colo. 109- 46:315, 1920.
- corni* Rob. Kans., Neb. 16- 56:60, 1924.
- ornata Osb. 68- 14:364, 1928.
- aza* Rob. Kans. 16- 56:291, 1924.
- tudella* Rob. Kans. 16- 56:291, 1924.
- tricincta* Fh. Eastern and Tex., Kans., Neb., Colo. 37- 9:63, 1851.
- var. *diva* McA. Md., Va., Kans. 109- 46:308, 1920.
- var. *calycula* McA. Md., Ill., Kans., Neb. 109- 46:308, 1920.
- var. *integra* McA. Md. 109- 46:309, 1920.
- var. *cymbium* McA. Ont., Pa., Mich., Neb., Kans., Tex. 109- 46:310,
1920.
- var. *disjuncta* McA. Pa., Kans. 109- 46:310, 1920.
- var. *rubravitta* Rob. Kans. 16- 56:156, 1924.
- var. *complementa* McA. Miss. 12- 16:135, 1926.

- var. *noncincta* Johns. Ohio. 69- 34:261, 1934.
- cancellata* McA. Md., Kans. 109- 46:320, 1920.
- beameri* Rob. Kans. 16- 56:61, 1924.
- gilensis* Beam. Ariz. 4- 22:123, 1927.
- portea* Rob. Ont., Kans. 16- 56:154, 1924.
- cherokee* Rob. Neb., Kans. 16- 56:154, 1924.
- kanwakae* Rob. Neb., Kans. 16- 56:292, 1924.
- irrorata* Rob. Kans. 16- 56:154, 1924.
- vitis* (Harr.) Eastern and Mo., Ia., Neb., Kans., Colo. 23- 3:43, 1831.
- var. *flava* Rob. Minn. 16- 56:62, 1924.
- var. *corona* McA. Md., Ill., Kans. 109- 46:304, 1920.
- var. *bistrata* McA. Md., Ill. 109- 46:305, 1920.
- var. *stricta* McA. Pa., Md., Ind., Ia., Kans., Colo. 109- 46:305,
1920.
- lacta* Rob. Ont., Kans. 16- 56:62, 1924.
- omaska* Rob. Kans. 16- 56:62, 1924.
- acuticephala* Rob. Kans. 16- 56:61, 1924.
- scripta* Rob. Kans. 16- 56:290, 1924.
- fraxa* Rob. Kans. 16- 56:292, 1924.
- breakeyi* Johns. Ohio. 69- 34:261, 1934.
- nigroscuta* Johns. Ohio. 69- 34:258, 1934.
- var. *rufomaculata* McA. Ohio. 12- 15:43, 1924.
- vaga* Johns. Ohio. 69- 34:260, 1934.
- attenuata* Johns. Ohio. 69- 34:260, 1934.
- rubrella* McA. Ohio. 109- 46:316, 1920.
- ancora* Beam. Tex. 4- 22:122, 1929.
- anfracta* Beam. Ariz. 4- 22:123, 1929.

Appendix

Omissions and Recently Described Species

Osbornellus

- rotundus Beam. Ala., S.C., Ga., Va., Miss., Fla., D.C., Conn.
53- 10:93, 1937.
- bifasciatus Beam. Ariz. 53- 10:97, 1937.
- tenuis Beam. Ariz. 53- 10:97, 1937.
- decorus Beam. Calif. 53- 10:93, 1937.
- clarus Beam. Kans., S.C., La., Miss., Ga., Tex., Ala., Fla., Md.
Ky., D.C., Va. 53- 10:99, 1937.
- omani Beam. Ariz. 53- 10:100, 1937.
- curvatus Beam. Calif. 53- 10:101, 1937.
- corniger Beam. Kans., Mo. 53- 10:102, 1937.
- spicatus Beam. Ariz. 53- 10:103, 1937.
- fumidus Beam. Ariz., N.Mex. 53- 10:104, 1937.
- alatus Beam. Conn., Miss., Va., Pa., Md. 53- 10:105, 1937.
- pallidus Beam. Ariz. 53- 10:105, 1937.
- lineatus Beam. Ariz. 53- 10:105, 1937.
- ater Beam. Tex. 53- 10:108, 1937.

Hebecephalus

- subitus Beam. N. Mex. 53- 10:60, 1937.
- merus Beam. Ariz. 53- 10:61, 1937.
- funestus Beam. N.Mex. 53- 10:61, 1937.

Jassus

- snowi Law. Ariz., Mex. 16- 59:171, 1927.
- floridanus Law. Fla. 16- 59:173, 1927.

REFERENCE BIBLIOGRAPHY

1. Acto Holm. Kongliga Svenska Vetenskaps-Akademien Handlinger.
2. Amyot, Charles J. B. & Serville, A. Historie Naturelle des Insecta. Hemipt. 1843.
3. Annals of the Carnegie Museum.
4. Annals of the Entomological Society of America.
5. Annals de la Societe Entomologique de France.
6. Biologia Centrali Americana--Homop. 1894-1900.
7. Brulle, August. Expedition Scientific de Moree--Insects, vol. iii, sec. 2, 1832-33.
8. Bulletin of the Bishop Museum.
9. Bulletin of the Brooklyn Entomological Society.
10. Bulletin of the Buffalo Society of Natural History.
11. Bulletin of the Connecticut Geol. & Natural History Survey.
12. Bulletin of the Illinois State Laboratory of Natural History.
13. Bulletin Societe d'Histoire Naturelle du Department de la Moselle. Metz.
14. Bulletin of the U.S. Geological & Geographical Survey of the Territories. F. V. Hayden, U.S. Geologist in charge.
15. Burmeister, Hermann. Genera quaedam Insectorum, Iconibus Illustravit et Descripsit. 1838-48.
16. Canadian Entomologist.
17. Colorado State Agr. College, The Agr. Exp. Sta. Bull.
18. Curtis, John. British Entomology.
19. Cuvier, George L., etc. Le Regne Animal.
20. Distant, William L. Fauna of British India. Rhynchota.
21. Donovan, Edward. The Natural History of British Insects. 1792-1813.
22. Edwards, James. The Hemiptera-Homoptera of the British Islands. 1896.
23. Encyclopedia Americana.
24. Encyclopedie Methodique. Tomes 3-10 Insects 1789-1825.
25. Entomologica Americana.

26. Entomologist.
27. Entomological Monthly Magazine.
28. Entomological News.
29. Entomologisk Tidskrift Stockholm.
30. Fabricius, Johann Christian. Entomologia Systematics, etc.
Hemip. in vol. iv, 1794; supplement 1798.
31. _____ Genera Insectorum, etc. 1777.
32. _____ Systema Rhyngotorum. Brunsvigae, 1803.
33. Fallen, Carl Frederich. Hemiptera Sueciae. Cicadariae, 1826.
34. _____ Monographia Cimicum Sueciae. 1807.
(Repub. in 1818.)
35. Faunnae Insectorum Germanie initia 1829-1844. by Herrich-Schaeffer.
36. Fieber, Franz. Katalog der Europaischen Cicadienen, etc. 1877.
37. Fitch, Asa. Catalogue with references and descriptions of insects
collected and arranged for the State Cabinet of Natural
History, etc. Homop. N.Y. St. Cab.
38. Flor, Gustav. Die Rhyngotorum Livlands, etc. Vol. i, 1860, ii, 1861.
39. Florida Entomologist.
40. Forster, Johann R. Novae Species Insectorum. Centuria I, 1771.
41. Fourth Report of the N.Y. Sta. Lab. of Natural History.
42. Germar, Ernst F. Fauna Insectorum Europae. 1834.
43. Goeze, J.A.E. Entomologische Beitrage zu des Ritter Linne zwolften
Ausgabe des Natur-system. Leipzig, II:161, no. 32, 1778.
44. Harriman Alaskan Expedition. Vol. iii, 1904.
45. Harris, Thaddeus W. A report on the insects of Mass. injurious to
vegetation. 1841.
46. Hawaiian Sugar Planters Association Exp. Sta. Div. of Ent. Bulletin.
47. Horae Societatis Entomologicae Rossicae.
48. Invertebrata Pacifica.
49. Insects Samoa. p. II Hemip., page 188., Br. Mus. Nat. Hist. 1934.
50. Journal of the Academy of Natural Sciences of Philadelphia.

51. Journal of the Cincinnati Society of Natural History.
52. Journal of the Department of Agriculture of Porto Rico.
53. Journal of the Kansas Entomological Society.
54. Journal of the New York Entomological Society.
55. Journal of the Washington Academy of Science.
56. Kansas University Science Bulletin.
57. Kirschbaum, C. L. Die Athysanus-Arten der Gegend von Wiesbaden.
1858 - (Der Wetterauischen Gesellschaft für die gesammte
Naturkunde zur Feier ihres Fünfzigjährigen Bestehens, etc.)
58. Kongliga Svenska Fregattens Euginies resa om Kring Jorden.
59. Kongliga Svenska Ventenskaps Akademien Handlingar.
60. Linnaeus. Systema Naturae (var. edns.)
61. _____ Fauna Suecica, etc.
62. Magazin der Entomologie, herausg von E. F. Germar.
63. Maine Agricultural Experiment Station Bulletin.
64. Meddelanden Societas pro Fauna et Flora Fennica. 1880.
65. Mono. der Jassiner Japan. Fuzotek Termes Fuz vo. 25, 1902.
66. Naturaliste Canadien.
67. Notiser ur Sällskapet - Fauna Flora Fennica.
68. Ohio Biological Survey Bulletin.
69. Ohio Journal of Science.
70. Ohio Naturalist.
71. Ohio State University Bulletin.
72. Ohio State University Studies.
73. Oshanin, B. F. Katalog der Palaarktischen Hemipteren. 1912.
74. Pan-Pacific Entomologist.
75. Pennsylvania Department of Agriculture Bulletin., Bureau of Plant
Industry.
76. Philadelphia Journal of Science.
77. Prairie Farmer.

78. Proceedings of the Academy of Natural Science of Philadelphia.
79. Proceedings of the American Entomological Society.
80. Proceedings of the Biological Society of Washington.
81. Proceedings of the Boston Society of Natural History.
82. Proceedings of the California Academy of Science.
83. Proceedings of the Davenport Academy of Science.
84. Proceedings of the Entomological Society of Washington.
85. Proceedings of the Iowa Academy of Science.
86. Proceedings of the U. S. National Museum.
87. Proceedings of the Washington Academy of Science.
88. Proceedings of the Zoological Society of London.
89. Provancher, L. Petite Faune Entomologique du Canada (viii, Hemip.)
90. Psyche.
91. Puton, A. Catalog des Hemepteres de la Faune Palearctique.
92. Report of the Canadian Arctic Expedition. 1919.
93. Report of the Illinois State Entomologist. (also 14th Rpt.)
94. Report of the Iowa Academy of Science.
95. Report of the N. Y. State Entomologist. (20th Rpt.)
96. Revue d'Entomologie.
97. Sahlberg, John. Ofversight af Finlands och den Skandinaviska halfons.
Cicadariae.
98. Say, Thomas. Complete writings of Thomas Say on the Entomology of
North America by J. L. LeConte.
99. Schrank, Frank von Paula. Enumeratio Insectorum Austriae Indegenorum.
1781.
100. Silbermann's Revue d'Entomologique.
101. Spangberg, J. Species Gyponae Generis Homopterorum. 1873.
102. _____ Akademien Handlingar. 1878.
103. Stal, Carl. Bidrag till Rio-Janeiro-Traktens Hemipter-Fauna.

104. Stal, Carl. Hemiptera Fabriciana.
105. Stettinger Entomologische Zeitung.
106. Tennessee State Board of Entomology Bulletin.
107. The American Midland Naturalist.
108. Thunburg, Carl. Acta Upsal.
109. Transactions of the American Entomological Society.
110. Transactions of the Entomological Society of London.
111. Transactions of the Maryland Academy of Science.
112. Transactions of the New York State Agricultural Society.
113. Transactions of the San Diego Society of Natural History.
114. Transactions of the Tyneside Field Club.
115. U. S. Department of Agriculture Technical Bulletin 231, 1931.
116. U. S. Department of Agriculture Miscellaneous Bulletins.
117. Verhandlungen der Kaiserlich-koniglichen Zoologische-Botanischen Gesellschaft in Wien.
118. VanDuzee Check List, 1916.
119. Walker, Francis. List of the Specimens of Homopterous Insects in the Collection of the British Museum. 1350-52. (Suppl. 1858.)
120. Zetterstedt, J.W. Insecta Lapponica descripta. 1840.
121. Zeitschrift fur die Entomologie, Germar. Leipzig, 1839-44.
122. American Entomologist
123. Essai sur les Jassides, 5 parts, Paris 1877-78.
124. Cicaden von Wiesbaden, 1868.
125. Dohrn, Anton. Catalogus Hemipterorum. Stettin, 1859.

Suggested Generic Papers on North American Cicadellidae
 Cited Under the Genus Name with Author and
 Literature Reference

<u>Genus Name</u>	<u>Author</u>	<u>Reference</u>
Agalliopsis Kirk.	Oman	115- 372:8-24, 1933
Agallia Curt.	Oman	115- 372:24-45, 1933
Acertagallia Kirk.	Oman	115- 372:45-70, 1933
Agalliana Oman	Oman	115- 372:70-71, 1933
Macropsis Lewis	Breakey	4- 25:787-844, 1932
Oncometopia Stal.	Ball	85- 8:7-12, 1901.
Homalodisca Stal.	Ball	85- 8:12-15, 1901
Aulacizes A. & S.	Ball	85- 8:5-7, 1901
Cicadella Latr.	Ball	85- 8:15-24, 1901
Kolla Dist.	Ball	85- 8:24-26, 1901
Helochara Fh.	Ball	85- 8:28-29, 1901
Graphocephala V.D.	Ball	85- 8:29-32, 1901
Draeculacephala Ball	VanDuzee Ball Ball & China	28- 26:176-181, 1915 39- 11:33-39, 1927 53- 6:1-4, 1933
Carneocephala Ball	Nottingham	53- 5:97-115, 1932
Gypona Germ.	Gibson Ball	86- 56:87-100, 1919 4- 13:87-90, 1920 and 4- 20:494-495, 1927
Dragonana B. & R.	Ball	4- 20:489-490, 1927
Gyponana Ball	Ball	4-13:85-87, 1920 4- 20:490-493, 1927
Prairiana Ball	Ball	4- 13:91-93, 1920 4- 20:495-496, 1927
Ponana Ball	Ball	4- 13:93-100, 1920 4- 20:496-499, 1927
Xerophloea Germ.	Lawson	74- 7:159-169, 1931
Xestocephalus V.D.	Peters	53- 6:73-80, 1933

<u>Genus Name</u>	<u>Author</u>	<u>Reference</u>
Spangbergiella Sign.	Lawson	53- 5:116-122, 1932
Parabolocratus Fieb.	Shaw	53- 5:38-52, 1932
Dicyphonia Ball	Beamer	53- 9:66-71, 1936
Aligia Ball	Ball	83- 12:53-59, 1907
Mesamia Ball	Ball	83- 12:59-70, 1907
Bandara Ball	Ball	9- 20:93, 1931
Twiningia Ball	Ball	9- 26:93-95, 1931 55- 22:19, 1932
Sanctanus Ball	Ball Oman	55- 22:10-11, 1932 84- 36:75-76, 1934
Scaphoideus Uhl.	Ball DeLong & Mohr DeLong & Beery	55- 22:11-16, 1932 107- 17:965-977, 1936 69- 36:334-342, 1936
Prescottia Ball	Ball	55- 22:16-17, 1932
Osbornellus Ball	Ball	55- 22:17-18, 1932
Portanus Ball	Ball	55- 22:18, 1932
Platymetopius Burm.	Ball	16- 63:217, 1931
Japanus Ball	Ball	16- 63:218, 1931
Scaphytopius Ball	Ball	16- 63:220-221, 1931
Deltopinus Ball	Ball	16- 63:218, 1931
Cloanthus Ball	Ball	16- 63:219, 1931
Platymoideus Ball	Ball	16- 63:226-227, 1931
Nasutoideus Ball	Ball	16- 63:221-222, 224-226, 1931
Convelinus Ball	Ball	16- 63:228, 1931
Flexamius DeL.	DeLong DeLong & Slesman	72- 2:22-33, 1926 4- 22:82-85, 1929
Alapus DeL. & S.	DeLong & S. Beamer & Tuthill	4- 22:86-87, 1929 56- 36:527-531, 1935
Latulus DeL. & S.	DeLong & S.	4- 22:87-88, 1929
Palus DeL. & S.	DeLong & S.	4- 22:85-86, 1929

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Polyamius DeL.	DeLong DeLong & Sleesman	72- 2:48-58, 1926 4- 22:88, 1929
Hebecephalus DeL.	DeLong DeLong & Sleesman Beamer & Tuthill	72- 2:58-64, 1926 4- 22:91-92, 1929 56- 36:531-539, 1935
Laevicephalus DeL.	DeLong DeLong & Sleesman	72- 2:64-63, 1926 4- 22:92-93, 1929
Amplicephalus DeL.	DeLong DeLong & Sleesman	72- 2:85-85, 1926 4- 22:96-97, 1929
Deltocephalus Burm.	DeLong DeLong & Sleesman	72- 2:85-97, 1926 4- 22:97-99, 1929
Lonatura O. & B.	DeLong	109- 52:93-102, 1926
Gillettiella Osb.	Osborn	4- 23:689-691, 1930
Amphipyga Osb.	Osborn	4- 23:691-697, 1930
Pectinapyga Osb.	Osborn	4- 23:697-698, 1930
Athysanella Bak.	Osborn	4- 23:698-706, 1930
Gladionura Osb.	Osborn	4- 25:706-712, 1930
Driotura O. & B.	Lawson	4- 21:449-456, 1928
Unoka Law.	Lawson	4- 21:458-459, 1928
Remadosus Ball	Ball Sleesman	109- 55:3-4, 1929 25- 10:93-95, 1930
Athysanus Burm.	Ball Sleesman	109- 55:5, 1929 25- 10:95-97, 1930
Exitianus Ball	Ball Sleesman	109- 55:5-6, 1929 25- 10:97-98, 1930
Drylix Edw.	Ball Sleesman Lawson	109- 55:6-7, 1929 25- 10:98-102, 1930 4- 24:587-590, 1931
Euscelis Brul.	Ball Sleesman	109- 55:7-8, 1929 25- 10:102-107, 1930
Ophiola Edw.	Ball Sleesman	9- 23:135-190, 1928 25- 10:107-121, 1930
Commellus O. & B.	Sleesman	25- 10:122-124, 1930.
Stirellus O. & B.	Thomas	53- 6:126-136, 1933

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Eutettix V.D.	Ball	83- 12:33-38, 1907
Norvellina Ball	Ball	83- 12:38-53, 1907
Phlepsius Fieb.	Osborn & Lathrop	4- 16:310-333, 1923
Texanus Ball	Osborn & Lathrop	4- 16:333-350, 1923
Acinopterus V.D.	Lawson	4- 20:232-241, 1927
Elymana DeL.	DeLong	4- 29:636-639, 1936
Cyperana DeL.	DeLong	107- 18:225-233, 1937
Paluda DeL.	DeLong	107- 18:233-234, 1937
Arundanus DeL.	DeLong	23- 46:130-133, 1935
Graminella DeL.	DeLong & Mohr	107- 18:622-630, 1937
Chlorotettix V.D.	DeLong	71- 23:1-29, 1919
		4- 19:499-511, 1926
	Brown	56- 21:235-255, 1933
Jassus Fabr.	Lawson	16- 59:167-174, 1927
Neocoelidia G. & B.	Oman	53- 4:62-68, 1931
Tinobregmus V.D.	Lawson	4- 25:359-364, 1922
Baldulus Oman	Dorst	84- 36:79-80, 1934
Davisonia Dorst	Dorst	116- 271:4-9, 1937
Sonronius Dorst.	Dorst	116- 271:9-11, 1937
Macrosteles Fieb.	Dorst	116- 271:11-22, 1937
Balclutha Kirk.	DeLong & Davidson	84- 37:99-103, 1935
Nesosteles Kirk.	DeLong & Davidson	84- 37:103-112, 1935
Alebra Fieb.	McAtee	54- 34:142-146, 1926
Dikraneura Hardy	Ball & DeLong	4- 18:324-337, 1925
	DeLong & Caldwell	84- 39:17-34, 1937
Forcipata DeL. & C.	DeLong & Caldwell	4- 29:70-77, 1936
Alconeura B. & DeL.	Ball & DeLong	4- 18:334-337, 1925
Empoasca Walsh.	DeLong	115- 231:1-51, 1931
Idona DeL.	DeLong	115- 231:51-60, 1931

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Typhlocyba Germ.	McAtee	86- 68:(18) 1-47, 1926
Hymetta McA.	Fairbairn	53- 1:87-90, 1928
Erythroneura Fh.	McAtee	109- 46:267-322, 1920
	Robinson	56- 16:101-155, 1926
	Beamer	16- 63:127-135, 240-244, 268-270, 285-289, 1931.
		16- 64:12-17, 45-48, 69-72, 82-88, 134-144, 158- 162, 174-181, 1932.
	Johnson	71- 31:51-122, 1935