

HOST PLANTS.—Breeds on *Acer spicatum* and *Viburnum acerifolium*.

KNOWN DISTRIBUTION.—Illinois, Maine, Minnesota, New York, Ontario, Pennsylvania, Wisconsin.

Illinois Record.—DOLSON: July 18, 1934, Rocky Branch, DeLong & Ross, 1 ♀.

Neolygus clavigenitalis Knight

Lygus (Neolygus) clavigenitalis Knight (1917b, p. 632).

Known from Connecticut, Maine, Maryland, Massachusetts, Ohio, but not yet collected in Illinois. Has been collected on smooth alder (*Alnus rugosa*).

Neolygus semivittatus Knight

Lygus (Neolygus) semivittatus Knight (1917b, p. 626).

Not yet taken in Illinois, but it should be found here eventually. Known from Alabama, Florida, Minnesota, Mississippi, New York, Pennsylvania, Texas, Virginia; feeds on white oak (*Quercus alba*).

Neolygus omnivagus Knight

Lygus (Neolygus) omnivagus Knight (1917b, p. 627).

MALE.—Length 5.40, width 2.20. Yellowish brown with apex of corium dark brown to fuscous; clavus dark brown or black; very much resembling forms of *semivittatus* Knight and *quercalbae* Knight; also similar in color to *caryae subfuscus* Knight, but genital claspers distinctive, fig. 164.

FEMALE.—Length 5.40, width 2.50. Usually paler than male, more yellowish brown; never reddish, as in *quercalbae*, nor with fuscous marks on pronotum as in *semivittatus* or *caryae subfuscus*; very similar to *canadensis* Knight, but that species has apical one-third of second antennal segment distinctly black, fuscous spot on apex of the corium smaller and embolium entirely without fuscous.

FOOD PLANTS.—White oak (*Quercus alba*), red oak (*Q. rubra*), scarlet oak (*Q. coccinea*) and probably other oaks; breeds occasionally on dogwood (*Cornus* sp.), chestnut (*Castanea* sp.) and arrow-wood (*Viburnum* sp.).

KNOWN DISTRIBUTION.—Connecticut, Illinois, Iowa, Massachusetts, Michigan, Minnesota, New Hampshire, New York,

North Carolina, Ontario, Pennsylvania, Quebec, Rhode Island, Vermont, Virginia, Wisconsin.

Illinois Records.—Eleven males and 25 females, taken June 4 to July 31, are from Dolson, Galena, Glen Ellyn, Grand Detour, Keithsburg, Lilly, Marshall, McHenry, Monticello, Mount Carroll, Oregon, Rockford, St. Anne, Savanna, White Pines Forest State Park, Willow Springs.

Neolygus hirticulus (Van Duzee)

Lygus tenellus Van Duzee (1912, p. 484), *not* Hahn.

Lygus hirticulus Van Duzee (1916a, p. 41).

MALE.—Length 4.80, width 2.28. General color dark ferrugino-testaceous, sometimes entirely dark fuscous or black, except for the legs and antennae; genital claspers distinctive, fig. 164.

FEMALE.—Length 5.30, width 2.30. Slightly larger and more robust than male. Uniformly colored with yellowish brown or, in some cases, dark brown; hemelytra rarely much darker than pronotum; easily confused with *fagi* Knight, but membrane is uniformly and faintly tinged with fuliginous color, never dark as in *fagi*.

FOOD PLANTS.—Chestnut (*Castanea* sp.), sugar maple (*Acer saccharum*), beech (*Fagus* sp.), ash (*Fraxinus* sp.), cottonwood (*Populus deltoides*) and woodbine (*Psedera* sp.).

KNOWN DISTRIBUTION.—Connecticut, Illinois, Iowa, Maryland, Massachusetts, Minnesota, New Hampshire, New Jersey, New York, North Carolina, Ohio, Ontario, Pennsylvania, Rhode Island, Vermont. Always rare.

Illinois Records.—ILLINOIS: 1 ♂; July 9, 1892, 1 ♀; July 16, 1892, 1 ♀. DUBOIS: June 3, 1919, 1 ♂. FRANKFORT: June 8, 1933, on *Fraxinus* sp., Mohr & Townsend, 3 ♂. URBANA: June 30, 1889, woods above lake, 1 ♂; July 20, 1917, cottonwoods, 1 ♂; July 27, 1917, cottonwood grove, 1 ♀. WILLOW SPRINGS: July 8, 1906, W. J. Gerhard, 1 ♀, FM.

Neolygus geminus new species

This is closely allied to *hirticulus* (Van Duzee), as individuals of the two species are similar in size and coloration, but the males are readily distinguished by the structure of the genital claspers, fig. 164.