

from Elizabethtown, Galesburg, Golconda, Grand Detour, Herod, Kansas, Rockford, St. Joseph, Savanna, Starved Rock State Park, White Heath.

Orthotylus candidatus Van Duzee

Orthotylus candidatus Van Duzee (1916*b*, p. 124).

Not taken in Illinois; known from Minnesota, New Hampshire, New York; breeds on American aspen (*Populus tremuloides*). Male claspers as in fig. 128.

Orthotylus knighti Van Duzee

Orthotylus knighti Van Duzee (1916*b*, p. 121).

Not taken in Illinois; known from Indiana, New York, Ohio; breeds on American aspen (*Populus balsamifera*) and balm of Gilead (*P. candicans*). Male claspers as in fig. 128.

Orthotylus serus Van Duzee

Orthotylus serus Van Duzee (1921, p. 131).

MALE.—Length 5.30, width 1.58. General color black; median line of pronotal disk and scutellum pale; embolium, outer margin of corium and cuneus pale greenish, translucent; genae, gula, bucculae, rostrum except apex, sternum, and legs, greenish yellow; membrane and veins uniformly dark fuscous. Male genital claspers as in fig. 128.

FEMALE.—Length 5.56, width 1.61; very similar to male in form and coloration; hemelytra with costal margins nearly parallel; sometimes the pronotal disk, vertex and front bordering eyes with broader pale mark than in male.

HABITS.—Breeds on hawthorns (*Crataegus punctata* and *C. tomentosa*).

KNOWN DISTRIBUTION.—Illinois, Iowa, New York.

Illinois Record.—FRANKFORT: June 8, 1933, on *Crataegus tomentosa*, Mohr & Townsend, 19 ♂, 32 ♀.

Orthotylus basicornis Knight

Orthotylus basicornis Knight (1923*d*, p. 515).

MALE.—Length 5.60, width 1.66. Rostrum reaching to middle of intermediate coxae. Antennae with first segment black, second yellowish to pale fuscous, third pale fuscous, fourth fuscous. General color

green; embolium and outer edge of corium yellowish green; membrane pale, veins green. Clothed with prominent, suberect, rather coarse, pale pubescence. Suggestive of *viridis* Van Duzee, but distinguished by the black, first antennal segment and structure of the male genital claspers, fig. 128.

FEMALE.—Length 5.60, width 1.70. Very similar to male in form, color and pubescence.

HOST PLANT.—Sandbar willow (*Salix longifolia*).

KNOWN DISTRIBUTION.—Illinois, Indiana, Iowa, Michigan, Minnesota, New York, Quebec, South Dakota.

Illinois Records.—Thirty-nine males and 30 females, taken June 9 to Aug. 24, are from Antioch, Beardstown, Bureau, Fulton, Freeport, Galena, Grand Detour, Kamps-ville, Keithsburg, McHenry, Normal, Oquawka, Quincy, Savanna, Urbana, Warsaw, Waukegan, West Union.

Orthotylus rossi new species

This species is allied to *basicornis* Knight, but differs in its shorter second antennal segment; the first segment is always paler or greenish above; the structure of the male genital claspers is distinctive, fig. 128. *Orthotylus rossi* is also allied to the western species, *fuscicornis* Knight, but differs in being larger, having a longer first antennal segment and short, recumbent pubescence, and in details of the genital claspers.

MALE.—Length 6.10, width 1.80. Head width 1.18, vertex 0.43. Rostrum, length 1.56, extending slightly beyond middle of intermediate coxae. Antennae, first segment, length 0.56, fuscous to black beneath, yellowish to green above; second, 1.95, yellowish green, length less than twice width of head; third, 1.08, fuscous; fourth, 0.56, fuscous. Pronotum, length 0.99, width at base 1.65. Clothed with rather short, recumbent, pale pubescence. General color uniformly yellowish green to clear green; eyes, first antennal segment beneath, tip of rostrum, and tips of tarsi, blackish; membrane pale, veins yellowish to greenish. Genital claspers distinctive, right clasper differs from that of *basicornis* by having a broad, truncated apex.

FEMALE.—Length 6.30, width 2.16. Head width 1.12, vertex 0.56. Antennae, first segment, length 0.54, fuscous to blackish beneath; second, 1.86; third, 1.08; fourth,