punctate; calli small, scarcely evident. Scutellum finely transversely rugose. Elytra scabrous or minutely strigose-punctate. Length, 4.6—4.8 mm.

Steuben County, Ind., June 15; swept from herbage in a tamarack swamp (W. S. B.). Rock City, N. Y., July 4 (Davis and Gerhard). Ashland, Mass., May 2 (Frost). Known heretofore only from New England and New York. Breeds on beech and yellow birch, Betula lutea Michx. It is said to prefer cool shady locations, the eggs hatching in early spring, the adults maturing in late June and disappearing by Aug. 1. This species resembles hirticulus closely, but is somewhat smaller, with general color paler, the male no darker than the female and membrane more uniformly dusky.

## 803 (1019). LYGUS HIRTICULUS Van Duzee, 1916, 41.

Head and pronotum usually uniformly dull greenish-yellow or pale reddish-brown, in some males in part or almost wholly fuscous-black; elytra and membrane as in key, cuneus pale translucent to brownish; legs greenish-yellow or pale straw-yellow; under surface of the same hue, the sides often with a vague reddish stripe. Antennæ greenish-yellow, faintly tinged with dusky toward apex, joint 1 two-thirds the length of pronotum, 2 three and a half times the length of 1, 3 and 4 united slightly shorter than 2, 4 two-thirds the length of 3. Pronotum with disk, except calli, finely rugose-punctate. Scutellum and clavus finely transversely strigose. Corium minutely scabrous. Length, 4.8—5.5 mm, (Fig. 186, b).

Marion Co., Ind., May 31—July 14; beaten from foliage of maple. Ranges from Maine and Massachusetts west to Michigan and Indiana. Recorded also by Van Duzee from Crescent City and Sevenoaks, Fla. Knight has reared specimens from chestnut, beech and woodbine.

## 804 (-). LYGUS IRRORATUS Sp. nov.

Elongate-oval. Pale brown, flecked above with numerous scattered spots of pale yellow, more thickly beneath with smaller spots of the same hue, the pale spots less evident on clavus and corium than on other parts above; membrane pale hyaline, veins yellowish; legs pale yellow, both femora and tibiæ vaguely marked with small brown spots. Joint 1 of antennæ yellow with three or four reddish-brown dots, three-fourths as long as width of vertex; 2 dull yellow, four and a half times as long as 1; 3 and 4 dusky, 3 one-fourth the length of 2, 4 two-thirds as long as 3. Upper surface thinly clothed with fine inclined yellowish hairs. Beak reaching hind coxæ. Pronotum twice as wide at base as at apex, hind portion rather strongly convex, thickly and finely transversely strigose with minute punctures between the strigæ; hind margin broadly rounded. Scutellum similarly strigose. Clavus and corium finely and shallowly rugose-punctate. Length, 3.8 mm.