

(Scotia Barrens, 26 July 77), Clarion (Rts. 36 & 208 near Tylersburg, 25 July 78), Crawford (Rt. 8, 2.3 mi S of Tillotson, 25 July 78), Dauphin (Bow Creek Rd. 1.5 mi N of Grantville, and Jonestown Rd., Shellsville, 15 July 77), Erie (Presque Isle and Erie, 26 and 27 July 78), Montgomery (Montgomeryville, 19 July 78), Northumberland (Dornsife and 2 mi S of Augustaville, 12 July 77, 1 August 78), Somerset (Thomas Mills, 8 July 77), and Venango (Rt. 36 just W of Forest Co. line, 25 July 78).

Only adults were taken in Pennsylvania, but we collected a few fifth instars with larger numbers of adults in mid-July at higher elevations in West Virginia (Tucker Co., Dolly Sods Wilderness Area, 17 July 77, on yarrow). Adults were also taken in Greenbrier Co., West Virginia (I-65 near Alta exit, 16 July 78, on yarrow).

Adult male.—Length 4.58 mm, width 1.66 mm, generally pale yellowish green, thickly clothed with erect, brown to golden setae. *Head*: Width 0.92 mm, vertex 0.42 mm. *Rostrum*: 2.28 mm, reaching base of genital segment. *Antennae*: Testaceous; I, length 0.32 mm; II, 1.30 mm; III, 0.42 mm; IV, 0.20 mm. *Pronotum*: Length 0.68 mm, width at base 1.40 mm. *Hemelytra*: Pale yellowish green, clavus, embolium, middle of corium and cuneus often tinged with pale brown or golden yellow; membrane brownish to golden yellow. Venter yellow. *Legs*: Yellowish to testaceous; tibial spines brown to fuscous; tarsi brown, last segment and claws fuscous.

Females are similar to males in coloration, although they are distinctly broader and the head is more strongly convex and produced than in males, which gives them a superficial resemblance to *Amblytulus nasutus* (Kirschbaum).

Fifth instar.—Length 3.00 mm, pallid yellow, dorsum clothed with erect, stout, black setae. *Head*: Pale yellow, eyes red, frons strongly produced in front of eyes; antennae uniformly pale, clothed with erect, black setae, segments II and III subequal; rostrum pale to testaceous, apex fuscous, reaching middle of abdomen. *Pronotum*: Pale yellowish, width at base about 2× length at middle, wing pads and scutellar area pale yellow, pads reaching 3rd abdominal segment. Abdomen pale yellow, dorsal scent gland opening weakly pigmented, not easily visible. Venter pale yellow. *Legs*: Pale; femora clothed with erect, black setae, especially near apices; tibiae pale, spines stout, black; tarsi testaceous, apical ½ of last segment and claws fuscous.

*Orthotylus viridinervis* (Kirschbaum)

Fig. 3a–c

*Orthotylus viridinervis* is also a common species throughout Europe and Great Britain (Carvalho, 1958). Wych or Scotch elm, *Ulmus glabra* Huds., is the most common host (Butler, 1923), but it has also been taken on *Alnus*, *Corylus*, *Quercus*, and *Salix* (Stichel, 1957). In Britain eggs overwinter and adults are found from early July until late August (Southwood and Leston, 1959). Southwood (1953) figured male and female genitalia.