

base, with apical third tapered to acute apex and with tooth short, at about three-fifths of length, inwardly curved (Fig. 252). Male subgenital plate with broadly triangular notch; female subgenital plate with narrow U-shaped or broadly V-shaped notch and with lobes on either side of notch obtusely pointed (Fig. 255). Ovipositor 17.6–21.7 mm long, straight or, more typically, slightly curved upward in apical half, with both valves narrowing to point (Fig. 258). Color brownish, flecked or streaked with gray, darker laterally, with hind femur often marked with black.

**Range.** Michigan to Ontario and Vermont, south to Georgia.

**Behavior and habitats.** The species occurs among dead leaves and scattered undergrowth of deciduous woods in dry locations.

**Life history.** Unknown. Probably overwinters in the egg stage, with nymphs hatching in spring, maturing in late spring or early summer, and persisting until frost. Adult specimens have been taken from early June until early October.

## Genus *Neduba* F. Walker

**Description.** Vertex prominent, narrow. Prosternum with 2 long sharp spines; pronotum large, nearly flat dorsally (Fig. 227), with lateral carinae distinct, and with median carina complete and more or less distinct; pronotal disc narrowest at anterior fourth, increasing in breadth anteriorly and to nearly twice anterior breadth posteriorly (Fig. 241); posterior margin semi-circular. Tegmina and hind wings developed only in males, these concealed by pronotum. Males with pseudocerci (“infracercal plates” of Caudell 1907*b*), which are simple elongate platelike structures. Ovipositor short, gently curved upward, with apical teeth above and below and with 12, or more, sharp elongate teeth on dorsal valve, fewer on ventral valve.

### *Neduba steindachneri* (Hermann)

Figs. 225, 240–244; Map 73

*Arytropteris steindachneri* Hermann, 1874:204, pl. VI, figs. 98–102.

*Tropizaspis picturata* Scudder, 1899g:83, 85.

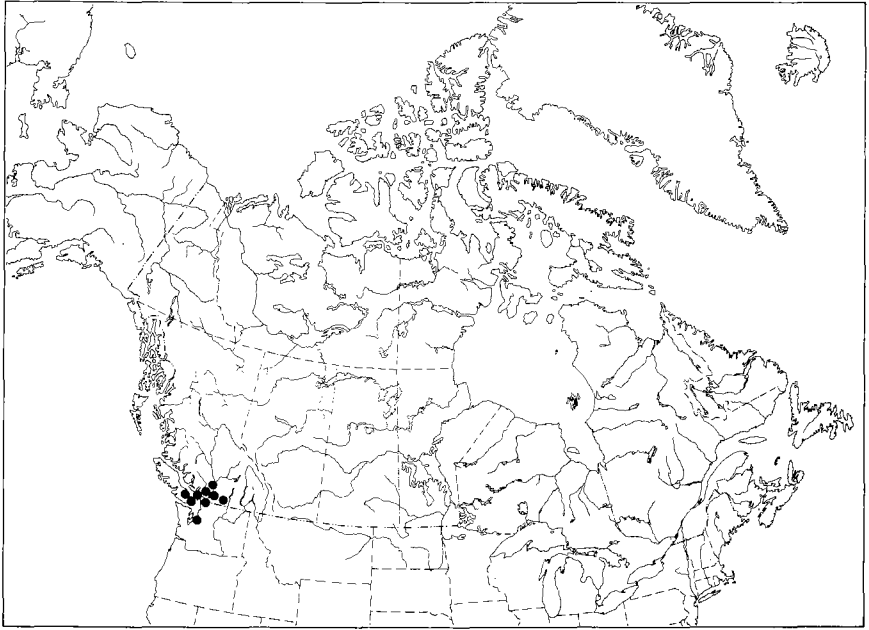
*Neduba carinata* var. *picturata* Caudell, 1907*b*:299, fig. 8.

*Neduba carinata* var. *convexa* Caudell, 1907*b*:300, fig. 9.

*Neduba steindachneri*; Rentz and Birchim 1968:42.

**Diagnosis.** Pronotum large, nearly flat dorsally, with lateral carinae distinct.

**Description.** Pronotum elongate (Figs. 225, 241), nearly half length of head and body combined (Fig. 240); lateral carinae converging posteriorly on anterior fifth, then diverging, twice as wide posteriorly as anteriorly (Fig. 241). Tegmina concealed. Prosternal spines usually present. Legs long, with hind femur more than twice as long as pronotum; hind tibia with 2 apical spurs (Fig. 242). Cerci of both sexes simple, rounded, tapering to apex (Fig. 243). Ovipositor short, less than two-thirds as long as hind femur, gently curved upward, armed at apex with 12, or more, sharp teeth on dorsal valve,



Map 73. Collection localities for *Neduba steindachneri*.

fewer on ventral valve (Fig. 244). Color light brown with darker mottlings or uniformly yellowish; lateral lobes of pronotum usually showing infuscation; fore and mid femora and tibiae usually with broad black bands; hind femur infuscate, mottled on outer face; abdomen nearly always with paired broad dark subdorsal stripes on basal half, covering sides of abdomen toward apex.

**Range.** British Columbia and Washington.

**Behavior and habitats.** Buckell (1930) states that *N. steindachneri* (as *N. carinata*) seemed to be confined to oak-*Arbutus* habitats on the south and east coasts of Vancouver Island and on the mainland only inland as far as Boston Bar in the Fraser River canyon. Specimens are difficult to locate during the day. They are well camouflaged and extremely hard to see. Fulton (1928) used the common name "camouflage cricket" for another species of *Neduba* in Oregon.

Stridulation, which occurs only at night, begins about 20:00 hours and continues until about 02:00 hours. The song consists of two sharp metallic clicks, followed by three or four "rather drawn-out sleepy-sounding notes; tick-tick-zeer-zeer-zeer" (Buckell 1930). The song is feeble and is not audible for more than a few metres. The insect jumps to the ground when disturbed, but it is not disturbed by a flashlight as close as 30 cm.

**Life history.** Unknown. Small nymphs have been found early in the spring, and adults have been collected in August.