

**PLAGIOGNATHUS VITELLINUS (SCHOLTZ), A CONIFER-FEEDING
MIRID NEW TO NORTH AMERICA (HEMIPTERA: MIRIDAE)**

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ABSTRACT—The Palearctic mirid *Plagiognathus vitellinus* (Scholtz) is reported in North America from 17 counties in Pennsylvania during 1972-73. A diagnosis and figures of the adult, last instar nymph, and male genitalia are provided. *Plagiognathus vitellinus* was found to breed on Douglas fir, *Pseudotsuga menziesii* (Mich.) Franco; European larch, *Larix decidua* Mill.; Norway spruce, *Picea abies* (L.) Karst.; Colorado spruce, *P. pungens* Engelm.; and white spruce, *P. glauca* (Moench) Voss. Characters are given for separating late instar nymphs of *P. vitellinus* from those of other phyline mirids breeding on these hosts. *Plagiognathus vitellinus* is an early season, univoltine species. Overwintered eggs hatched in early May; adults first appeared in late May and were abundant only for a few weeks in June. *Plagiognathus vitellinus* appears to be an introduced species in North America. An introduction on nursery stock rather than on ship ballast is considered probable.

Plagiognathus vitellinus (Scholtz) represents the second Palearctic mirid discovered in North America during our survey of the Miridae associated with conifers in Pennsylvania. Recently, we reported *Camptozygum aequale* (Villers) from Pennsylvania and its association with Scotch pine, *Pinus sylvestris* L. (Wheeler and Henry, 1973). This paper summarizes our observations on *P. vitellinus* during 1972-73.

Plagiognathus vitellinus was described as *Capsus vitellinus* by Scholtz in 1846 and placed in the genus *Psallus* by Fieber (1861). Wagner (1952) described the subgenus *Parapsallus* in which he included *vitellinus* and *dilutus* Fieber. This arrangement was followed in Carvalho's (1958) "Catalog of the Miridae of the World" which covered all literature to the end of 1955. In that year, however, Wagner (1955) removed *vitellinus* from *Psallus* to *Plagiognathus* based on the type of pubescence, tarsi, vesica, and certain other characters. Later, Wagner (1961) placed *dilutus* as a variety of *vitellinus*. Woodroffe (1957) agreed that *vitellinus* did not belong in *Psallus s. str.*; Stichel (1958) and Southwood and Leston (1959) also followed Wagner (1955). Kerzhner (1964) elevated *Parapsallus* to generic rank with *vitellinus* as the only included species. Since he gave no basis for this decision, we are following Wagner (1955) by retaining *vitellinus* in *Plagiognathus*.

Plagiognathus vitellinus occurs throughout Europe and in Siberia and Algeria (Carvalho, 1958) and perhaps represents an introduced species in England (Butler, 1923). It is restricted to conifers, including