

SPANOGONICUS ALBOFASCIATUS (HEMIPTERA: MIRIDAE): A PREDATOR IN FLORIDA SOYBEANS^{1,2}

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ABSTRACT

The predaceous mirid *Spanogonicus albofasciatus* (Reuter) was collected in northwestern Florida soybean fields during the summer of 1971. It was most common on young soybean plants, and populations declined rapidly as plants grew. Predation studies in the field indicated that *S. albofasciatus* is apparently a predator of *Heliothis zea* (Boddie) and *Pseudophusia includens* (Walker) eggs.

During the summer of 1971, a black flea hopper, *Spanogonicus albofasciatus* (Reuter), was found in northwestern Florida soybean fields. Although present on many crop plants, *S. albofasciatus* apparently has not previously been reported as a predator in soybean fields. This black flea hopper is widely distributed in the United States. In southern California it was first reported on alfalfa (Van Duzee 1914). *S. albofasciatus* has been cited as a pest of cotton seedlings, cucurbits, corn, alfalfa, and other plants in an area extending from Arizona to North Carolina (Coop. Econ. Insect Report). It was reported damaging golf greens in New York (Knight 1941) and Missouri (Knight 1941, Satterthwait 1944) and carrots, beets, and chards in Hawaii (Holdaway 1944). *S. albofasciatus* was found on grapes and coreopsis in Illinois (Knight 1941). Blatchley (1926) reported it from Florida. Host plants in Arizona (Stoner 1965) included 31 species and 16 families. Telford et al. (1962) attributed square shedding of slow-growing cotton varieties to the feeding of *S. albofasciatus* adults and nymphs on the young foliage. Subsequently, Stoner and Bottger (1965) found feeding damage by this black flea hopper to be negligible and also showed it to be somewhat predatory. Butler and Stoner (1965) published the life history of *S. albofasciatus*.

There is reason to believe that it may be predaceous on major crop pests. Recently, laboratory studies (Butler 1965) have revealed *S. albofasciatus* to be a potentially important predator of mites, bollworm eggs, aphids, and lygus bugs. Closely related species have been reported feeding on such diverse prey as moths, leafhoppers, and mites (Sweetman 1958, MacLellan 1962, Beingolea 1959). To determine its possible effect on noctuid pests of soybeans, the seasonal abundance and predatory activity of *S. albofasciatus* were observed at Quincy, Florida during 1971.

METHODS AND MATERIALS

Seasonal abundance of adult *S. albofasciatus* was determined from

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