

plants and infested Althea blossoms and *Ampelopsis* foliage further away. Alfalfa, corn, tomatoes, pears in adjoining fields and cowpeas and pole beans in the nursery were uninfested, although the beans were close to the infested weeds. Smartweed in the midst of the cowpeas and tomatoes was badly eaten. The insects were found occasionally resting on other plants such as *Tamarix africana* in the nursery and corn silk in the field, but no feeding could be detected.

When disturbed during the heat of the day, the beetles would partly fall and fly off in a clumsy manner with a slight buzzing sound. On the whole they were quite active. Late in the day they were less active and would fall to the ground when disturbed. A number were noted in the attitude of copulation, but very few were found in copulo.

Mr. C. H. Uchida was kind enough to translate accounts of this insect as given in two Japanese text books. The first one is that given by S. Matsumura in his "Japanese Insect Pests," part 2, p. 247. He states that the beetles do considerable damage to string beans, grapes and certain wild beans; that the adults emerge in June and remain until September; that they are attracted by lights and controlled by hand picking and spring and fall plowing. The other account is that given by A. Fukatani in "Practical Methods of Destroying Insects on Horticultural Plants," p. 325. Mr. Fukatani gives the following account: The species feeds on string beans, peas, grapes and peanuts, the larvæ being found in the soil on the roots. The eggs are milky white, elliptical and about one-sixteenth of an inch in length. The larva is a characteristic white grub about three-fourths of an inch long, milky white, with a yellowish brown head. The pupa is about one-half inch in length, yellowish, covered with short hairs. The larva winters in the soil and pupates in May or June, the beetles emerging in July. Eggs are deposited singly in the soil and the larvæ moult several times before winter, the complete life cycle requiring one year. He also states that control is effected by jarring the beetles off the plants into a dish of oil and water; by jarring them from trees to a cloth spread below; by spraying with Paris green, lime and water; Paris green and Bordeaux mixture and by the use of Vaporite