

acceptable in a management program to control *Heliothis* spp. when using both biological and chemical control tactics.

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NEW HOST PLANT RECORD FOR THE STINK BUG
THYANTA CUSTATOR
(HEMIPTERA: PENTATOMIDAE) IN FLORIDA

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Thyanta custator (Fabricius) is a Nearctic pentatomid whose distribution in the United States is restricted to the Gulf and Atlantic coast states (Ruckes 1957, D. A. Rider, personal communication). This species, as well as many other species of *Thyanta*, seldom reaches pest status (Panizzi and Herzog 1984). Little information is available on its biology and damage potential to crops, although it may inoculate soybean seeds with the yeast-spot disease agent (Daugherty 1967). In addition, *T. custator* has been confused with other species in the genus (McPherson 1982) making data on *T. custator* biology from the literature unreliable. For example, Furth (1974) reported several host plants of "*T. custator*" including wild (e.g., pokeweed, *Phytolacca* spp. and ironweed, *Vernonia* spp.) as well as cultivated (e.g., peach, *Prunus persica* Batsch and alfalfa, *Medicago sativa* L.) species, but these records are probably for the similar species *T. pallidovirens* (Stål), which occurs throughout most of the USA (Rider, personal communication). Apparently, the only reliable host record for *T. custator* is haw, *Viburnum* spp. (Dozier 1920; Rider, personal communication).

During October, 1984 in north central Florida, Alachua County, we found eggs and nymphs of *T. custator* on pods of an apparently unreported host plant, the wild legume hemp sesbania, [*Sesbania emerus* (Aublet) Urban (= *S. exaltata* (Rafinesque) (Rydberg)]. Several 3rd instar nymphs brought back to the laboratory were successfully reared to adults on field-collected *S. emerus* pods. With continued feeding on *S. emerus* pods, these adults mated and produced viable eggs; some of the adults lived for 50 days, when observations were discontinued due to lack of pods in the field. A few of these adults, provided with mature soybean seeds (instead of *S. emerus* pods) and a cotton-stoppered water vial, also mated and laid viable eggs. In addition, nymphs of *T. custator* were successfully reared in the laboratory from egg to adult on *S. emerus* pods and on raw, shelled peanuts (*Arachis hypogaea* L.) but not on mature soybean seeds.

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Although field observations indicate that *T. custator* is found on *S. emerus* only occasionally, we have yet to find it on any other hosts. Our laboratory results suggest that *S. emerus* is a suitable food for this pentatomid. We thank D. Hall for identifying the plant species, R. I. Sailer and D. A. Rider for identifying the insect species, and R. I. Sailer, D. H. Habeck and D. A. Rider for reviewing an early draft of this note, Florida Agricultural Experiment Station Journal Series No. 6235.

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GRASSHOPPER (ORTHOPTERA: ACRIDIDAE) DAMAGE TO PINE SEEDLINGS AT NIGHT IN A SEED ORCHARD

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During a hot, dry period, grasshopper species whose social behavior was being studied seemed to be unusually sedentary during the day, because no reproductive behavior or feeding was observed. A night visit to the study site, a newly established loblolly pine (*Pinus taeda* L.) seed orchard (1982, Schenck Forest, Wake County, NC), revealed that grasshoppers were active at night. Also that three species, *Melanoplus bivittatus* (Say), *Melanoplus femurrubrum* (DeGeer), that typically feed on forbs and grass (Bailey & Mukerji 1976, Mulkern et al. 1969), and *Schistocerca americana* (Drury), known to feed on broadleaf scrubs and trees as well as weeds (Otte, 1975), were feeding on pine seedlings. From 10-VII-1983 to 22-VII-1983, the Wake County area was experiencing hot, dry weather with minimum temperatures above 18°C and maximum temperatures of 28 to 43°C. No rainfall was recorded.

During four night visits to the orchard, grasshoppers feeding on the pine seedlings were counted. Nymphs were also collected and raised to adults in the laboratory so that species identifications could be verified (Blatchley 1920, Helfer 1963). (Voucher specimens have been deposited in the insect collection, Entomol. Dept., NCSU). Five days were devoted to assessing the damage incurred by the pine seedlings. For 173 seedlings, the lengths of branch tips that bore mandibular (feeding) scars were measured. Counts