

NEW INSECT RECORDS ON BRAZILIAN PEPPERTREE,
SCHINUS TEREBINTHIFOLIUS (ANACARDIACEAE),
IN SOUTH FLORIDA

J. R. CASSANI AND D. R. MALONEY
Lee County Hyacinth Control District
P.O. Box 06005
Ft. Myers, Florida 33906

D. H. HABECK AND F. D. BENNETT
University of Florida
Department of Entomology and Nematology
Gainesville, Florida 32611

Brazilian peppertree (*Schinus terebinthifolius* Raddi; Anacardiaceae) is a woody shrub that has been widely introduced and is naturalized in over 20 countries (Ewel et al. 1982). *Schinus terebinthifolius* has attained weed status in many areas outside its native range of Argentina, Paraguay and Brazil. In south Florida, *S. terebinthifolius* is an aggressive invader in a variety of habitats, especially those that have been disturbed by burning, clearcutting or natural disruptions such as hurricanes (Alexander & Crook 1973).

Schinus terebinthifolius is presently under investigation to determine the potential for biological control in Florida with insects or other arthropod control agents (Bennett et al. in press). Previous surveys of the arthropod fauna on *S. terebinthifolius* in Florida have resulted in a relatively low proportion (40%) of foliage consuming arthropods (Ewel et al. 1982, Cassani 1986). Many of these were collected as adults and represent only incidental associations.

Periodic surveys of the arthropod fauna on *S. terebinthifolius* in south Florida during the period 1986-1988 have resulted in several new insect records on *S. terebinthifolius*. These records represent the first association of foliage consuming Lepidoptera on *S. terebinthifolius* in Florida. A list of Lepidoptera species collected on *S. terebinthifolius* and related phenological information is presented in Table 1. *Schinus terebinthifolius* represents a new host record for all species involved and is apparently the only host record for *Paectes obtunda* (Gn.) and *Protambulyx carteri* (R & J).

TABLE 1. FIELD AND LABORATORY DATA PERTAINING TO LEPIDOPTERA COLLECTED ON *SCHINUS TEREBINTHIFOLIUS* IN SOUTH FLORIDA.

Taxa	Date(s) Collected	Stage	Association	Date(s) Pupating	Date(s) Emerged
Blastobasidae					
<i>Blastobasis eriobotryae</i> Busck	04-III-87	larvae	dead leaves	15-III-87	30-III-87 06-IV-87 29-IV-87 02-XI-87
<i>Hoicocera</i> sp.	28-X-87	pupa	?	—	—
Limacodidae					
<i>Sibine stimulea</i> (Clem.)	09-X-85	eggs	leaves	14-X-85 ^a	—
Noctuidae					
<i>Paectes abrostoloides</i> (Gn.)	16-IX-87 18-IX-87	larva "	leaves "	23-IX-87 21-IX-87	06-X-87 ♀ 06-X-87 ♂
	23-IX-87 24-IX-87 18-X-87	" " "	" " "	28-IX-87 05-X-87 05-X-87	09-X-87 ♀ 18-X-87 ♀ 26-X-87 ♀
<i>Paectes obrotunda</i> (Gn.)	18-VIII-86 "	larva "	leaves "	parasitized 05-IX-86 08-IX-86	22-IX-86 ♂ 25-IX-86 ♀
Pyralidae					
<i>Talitola atrifascialis</i> (Hulst)	12-IX-88	larva	leaves	19-IX-88	29-IX-88
Sphingidae					
<i>Protambulyx carteri</i> R. & J.	18-VIII-86	larva	leaves	31-VIII-86	29-IX-86 ♂
<i>Protambulyx strigilis</i> L.	01-XII-85	larva	leaves	06-XII-85	31-XII-85
Tortricidae					
<i>Episimus augmentus</i> (Zeller)	04-III-87 "	larva "	seeds/leaves "	23-III-87 15-III-87	03-IV-87 26-III-87
<i>Platynota rostrana</i> (Wlk.)	12-IX-88	larva	?	17-III-87 23-IX-88	28-III-87 03-X-88

^aEgg eclosion, larvae preserved in 4th instar.

Paectes abrotoloides (Gn.) was the most common species encountered. It is more frequently found associated with sweetgum (*Liquidambar styraciflua*) (Kimball 1965), and is occasionally a significant pest of sweetgum in Louisiana (Solomon and Cook 1978). Larvae of *P. obrotunda* and *P. abrotoloides* feed on the tender apical leaves but cause little damage because of their generally low overall density. One larva of *P. abrotoloides* was parasitized by the tachinid fly *Chetogena* sp. A previously unidentified Lepidoptera larva was found to be parasitized by the braconid *Macrocentrus delicatus* Cresson and adult emergence was prevented by the parasite. However, an identical larva was reared on *S. terebinthifolius* and identified at a later date from an adult specimen as *Tallula atrifascialis* (Hulst) (Table 1).

None of the remaining Lepidoptera species collected on *S. terebinthifolius* were found to cause significant damage to the plant. Several species, such as *Platynota rostrana* (Wlk.), *Tallula atrifascialis* and *Sibine stimulea* (Clem.) represent somewhat incidental associations with *S. terebinthifolius* due to their polyphagous nature.

We thank the following for identifying or confirming the identity of our Lepidoptera collections and associated parasites: D. Adamski, D. C. Ferguson, J. B. Heppner, P. Marsh, R. W. Poole, and N. E. Woodley.

REFERENCES CITED

- ALEXANDER, T. R., AND A. G. CROOK. 1973. Recent and long-term vegetation changes and patterns in South Florida: Part I: Preliminary report. South Florida Environmental Project. University of Miami, Coral Gables.
- BENNETT, F. D., L. CRESTANA, D. H. HABECK, AND E. BERTI-FILHO. (in press). Brazilian pepper-tree: prospects for biological control. Proc VII Int. Symp. Biol. Contr. Weeds. 6-11 March 1988, Rome, Italy.
- CASSANI, J. R. 1986. Arthropods on brazilian peppertree, *Schinus terebinthifolius* (Anacardiaceae), in South Florida. Florida Ent. 69: 184-196.
- EWEL, J. J., D. S. OJIMA, D. A. KARL, AND W. F. DEBUSK. 1982. *Schinus* in successional ecosystems of Everglades National Park. South Florida Research Center Report T-676. 141 pp.
- KIMBALL, C. P. 1965. The Lepidoptera of Florida, an annotated checklist. Florida Dept. of Agric. Div. of Plant Industry, Gainesville.
- SOLOMON, J. D., AND J. R. COOK. 1978. Epidemic 1977—year of the hardwood lepidopterous defoliators. J. Mississippi Acad. Sci. (Suppl.) 23: 1.