

- PEMBERTON, C. E., AND H. F. WILLARD. 1918. Interrelations of fruit fly parasites in Hawaii. *J. Agr. Res.* 15: 419-65.
- PRESCOTT, J. A. AND R. M. BARANOWSKI. 1971. Effects of temperature on the immature stages of *Anastrepha suspensa* (Diptera: Tephritidae). *Fla. Ent.* 54: 297-303.



SELECTIVE FEEDING ON SWEETPOTATO VARIETIES BY SOUTHERN ARMYWORM¹—(Note). Although considerable damage often is inflicted on sweetpotatoes by Lepidoptera, no information was found on resistance of sweetpotatoes to leaf-feeding Lepidoptera in the field. An experimental planting of 8 sweetpotato varieties heavily infested with southern armyworm, *Spodoptera eridania* (Cramer) afforded an opportunity to evaluate feeding differences.

Eight sweetpotato varieties were planted in single row randomized plots 30 ft long with 5 replicates. The caterpillar population was dispersed fairly evenly over the plots and the vines of the different sweetpotato varieties often extended across 2 and sometimes 3 rows; as a result larvae had access to as many as 4 varieties within a small area. Twenty leaves randomly selected from plants originating in each plot were evaluated as to percent injury, and rated on a scale of 1-8, for increasing levels of damage. Results were analyzed by Friedman's test (Langley, R. 1960. *Practical Statistics*. Dover, New York. 399 p.).

NC Porto Rico 198 was significantly ($p=0.05$) less damaged than were either NC 212 or Gold Rush (Table 1). Although other varieties suffered intermediate levels of damage, these data were not significantly different from varieties most or least damaged. These results clearly indicate that southern armyworm exhibits a preference for some varieties of sweetpotato. The assistance of Dr. L. E. MacCarter in analyzing the data is gratefully acknowledged. Dale H. Habeck, Department of Entomology and Nematology, University of Florida, Gainesville, Florida 32611.

TABLE 1. INDEX OF MEAN DAMAGE TO LEAVES OF 8 SWEETPOTATO VARIETIES BY SOUTHERN ARMYWORM, *Spodoptera eridania*.

Variety	Feeding Index*					Mean
	Replicate					
	1	2	3	4	5	
NC Porto Rico 198	2.6	4.5	4.3	3.4	4.1	3.8a†
Centennial	4.5	6.0	5.6	4.8	4.7	5.1ab
Gem	3.7	6.0	4.6	4.8	7.2	5.2ab
Rose Centennial	3.3	5.5	6.4	6.4	5.3	5.3ab
Georgia Red	3.4	5.5	6.0	6.3	5.8	5.4ab
Porto Rico Unit #1	5.4	5.7	5.3	6.4	4.9	5.5ab
NC 212	5.3	6.6	6.4	6.6	5.2	6.0 b
Gold Rush	5.9	6.0	6.7	7.2	5.6	6.3 b

*Data are the mean damage on 20 leaves examined in each replicate where 1=0-12.5% leaf consumed, 2=12.5-25.0%, etc. to 8=87.5-100%.

†Means followed by the same letter are not significantly different from each other at $p=0.05$.

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