

## Research Note

### DIFFERENTIAL MITE INFESTATION OF CASSAVA VARIETIES<sup>1,2</sup>

Native varieties of cassava, *Manihot esculenta* Grantz have been commonly cultivated in Puerto Rico. The Agricultural Experiment Station has introduced new varieties to study their agronomical characteristics in search of better varieties, i.e., higher yield and better quality. For this purpose, in Isabela, a cassava growing area, 11 varieties were planted

TABLE 1.—*Infestation of mites, Mononychellus caribbeanae* (McG.), observed on different cassava varieties, Isabela, Puerto Rico, 1972

Variety	Mean infestation index <sup>1</sup>
Nativa	1.25
Brazil	2.00
P.I. 9568	2.75
P.I. 9581	3.00
P.I. 9566	3.25
Pana Monacillo	3.50
S-D-2	3.75
P.I. 9567	3.75
P.I. 9607	4.00
Compadre Marquez	4.00
Ceiba	4.50
Llanera	5.00

<sup>1</sup> Mean of 4 replicates. Index: 0 = No damage; 5.0 = heaviest damage (90–100% of plants in the plots affected).

February 16, 1972, with the “Nativa” variety as check, a randomized complete block design replicated four times. In September of the same year these varieties were heavily infested by a tetranychid mite, identified as *Mononychellus caribbeanae* (McG.) by Robert L. Smiley of the U.S. National Museum.

To determine the degree of mite infestation in the varieties an evaluation was conducted based on the symptoms and damage observed in the overall plot. An index system was used to describe the damage: 0—plots exhibiting no damage and 5—the heaviest damage observed (90–100% of plants in the plots affected or plants defoliated). Intermediate values were assigned accordingly.

All varieties had some degree of mite infestation, and all the introduc-

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<sup>2</sup> Mr. Edwin Abreu, Department of Crop Protection, made arrangements for the identification of the species of mites.

tions were more affected than the "Nativa" variety (table 1). Varieties Brazil and P.I. 9568 were more resistant than "Nativa." Variety Llanera was the most affected. Most of the stems of this variety were defoliated at the time of the evaluation and were uniformly affected in all the replications.

The mites were effectively controlled with two applications of Kelthane<sup>3</sup> 35WP (dicofol) at the rate of 1 lb/acre in 100 gal water. Observations made 5 days after the first application showed good control of the mites. The second application was made 1 week later. One month after the first application all the varieties had recovered and the plants were free of mites.

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<sup>3</sup>Trade names in this publication are used only to provide specific information. Mention of a trade name does not constitute a warranty of equipment or materials by the Agricultural Experiment Station of the University of Puerto Rico, nor is this mention a statement of preference over other equipment or materials.