

RESEARCH NOTES

A MOSAIC DISEASE OF WATERMELON AT LAJAS VALLEY

A mosaic virus isolated from watermelons *Citrullus vulgaris* (Schrad.) var. Sugar Baby, growing in Mr. Nathan Davis' farm at Lajas, induced symptoms on cucumber *Cucumis sativus* (L.) var. Black Diamond and pumpkin *Cucurbita pepo* (L.) var. Fortuna that were indistinguishable from those produced in these hosts by the cucurbit virus B, described by Adsuar and Cruz Miret¹ from Puerto Rico. The virus is easily transmitted by rubbing the infectious sap with carborundum and was successfully transmitted to three other cucurbitaceous plants: Wild cucumber *Cucumis anguria* (L.) and squash *Cucurbita pepo* (L.) var. Melopepo var. Early Prolific Straight-neck, and *Luffa cylindrica* (Roehm). The following plants proved insusceptible to the virus when inoculated by mechanical means: *Lycopersicon esculentum* (Mill.) var. Marglobe, *Datura stramonium* (L.), *Zinnia elegans* (Jacq.) var. Golden Gem, *Gomphrena globosa* (L.), *Nicotiana glutinosa* (L.), *Capsicum frutescens* (L.) var. Large Bell Hot, *Nicotiana tabacum* (L.) var. Virginia, *Phaseolus vulgaris* (L.) var. Scotia, *Vigna sinensis* (Savi) var. Black Cowpea, and *Chenopodium amaranticolor* (L.).

The virus has a dilution end-point in crude sap of 1:100. It is inactivated when held at 50°C. for 10 minutes and loses its infectivity after 24 hours at room temperature (28–30°C.). The virus is still infective after 8 months in leaves frozen at –10°C. The virus was transmitted from infected to healthy watermelon with *Aphis gosypii* Glover in a limited number of tests.

José Adsuar

Department of Plant Pathology and Botany

¹ Adsuar, J., and Cruz Miret, A., Virus Diseases of Cucumbers in Puerto Rico, Tech. Paper 6, 1950, Agr. Expt. Sta., Univ. P.R., Río Piedras, P.R.