

## **Yield and Fruit Quality Traits of Mamey Sapote Grown at Two Locations in Puerto Rico**

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Six mamey sapote (*Pouteria sapota*) cultivars grown on an Oxisol and Ultisol were evaluated for four years under intensive management at Isabela and Corozal, Puerto Rico, respectively. There were significant differences in number and weight of fruit per hectare between locations and years. Significantly more fruit were produced at Corozal (24,906 fruit/ha) than at Isabela (17,783 fruit/ha). Fruit yield at Corozal and Isabela was 15,922 and 11,778 kg/ha, respectively. There were significant differences among varieties for number of fruit and yield per hectare at both locations. At Isabela and Corozal cultivar Tazumal produced significantly more fruit averaging 37,552 and 46,290 fruit/ha, respectively. Significantly higher fruit yield was attained by cultivars Pantin, Tazumal and Magaña at Isabela which averaged 16,424 kg/ha, whereas at Corozal cultivar Tazumal showed significantly higher fruit yield (23,844 kg/ha). Cultivar Copan had the lowest fruit yield at both locations averaging 8,024 kg/ha. At Isabela, cultivar Pace had significantly higher (31.3%) fruit soluble solids (Brix) than other cultivars whereas there were no significant differences in soluble solids among varieties in Corozal averaging 30.0%. At both locations individual fruit weight was significantly higher in cultivar Magaña. This cultivar produced significantly longer fruit with significantly greater diameter than other cultivars. Entomological research during this study demonstrated that mamey sapote at the color break stage is a very unlikely host to fruit flies *Anastrepha suspensa* and *A. obliqua*, making fruit exportation possible to locations where these flies are not present.