

Title Plantain hybrids: Fresh market and processing characteristics
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Abstract

In 2004, the presence of a fungus known as *Mycosphaerella fijiensis* that causes the disease Black Sigatoka, was detected on plantain leaves in Puerto Rico. This situation motivated this study on the potential use of Black Sigatoka-resistant hybrids in Puerto Rico. To achieve this characterization, chemical tests were performed, including pH and °Brix determination. Additional tests were conducted to determine resistance to mechanical damage, storage time, yield, pulp and peel color change, force needed for cutting and peeling, and processing properties. Results were analyzed using ANOVA ($P = 0.05$) and means compared with the Tukey test. Performance of plantain hybrids varied with maturity stage. At the green stage, best performances were exhibited by PITA 16, CRBP 39 and PV 42-81. At the mature stage, best performances were observed in SH 3640, PITA 16 and PV 42-320. At the overripe stage, hybrids that outperformed the Control were CRBP 39, PV 42-81 and FHIA-21. In conclusion, PITA 16 and CRBP 39 were the two varieties that exhibited quality characteristics similar or superior to the Control (Maricongo) in more than one maturity stage.