

THE HIDDEN GOLD OF THE CARIBBEAN:
ROOTS AND TUBERS REIMAGINED

AUTHORS

Martha C. Giraldo Zapata¹, Wanda Almodóvar² and Giovannie Soto-Torres³
martha.giraldo@upr.edu; wanda.almodovar@upr.edu

AFFILIATIONS

¹Professor, Department of Agro-Environmental Sciences, College of Agricultural Sciences, University of Puerto Rico Mayagüez Campus; ²Professor, IPM Coordinator, Department of Agro-Environmental Sciences, College of Agricultural Sciences, University of Puerto Rico Mayagüez Campus. ³Agricultural Extension Agent E.U. Camuy - Hatillo - Quebradillas, Agricultural Extension Service, College of Agricultural Sciences, University of Puerto Rico Mayagüez Campus.

INTRODUCTION

This project advances the implementation of Integrated Pest Management (IPM) strategies for sweet potato (*Ipomoea batatas*), tanier (*Xanthosoma* spp.), and yam (*Dioscorea* spp.) to enhance crop yield and commercial quality across Puerto Rico. As part of a multi-year educational campaign, annual pocket guides were developed for each tuber, featuring IPM practices, nutritional and functional benefits, simple recipes, and a comic strip designed to engage younger audiences. Each guide introduces action characters that promote the crops as Caribbean Superfoods, reinforcing their cultural and dietary significance. Published in Spanish, English, and French, the guides are accessible via the IPM Roots and Tubers Extension Service website. These characters serve as central tools in outreach efforts led by Extension faculty, targeting elementary schools, 4-H youth programs, and broader community groups. Island-wide field days provide hands-on, experiential learning opportunities, fostering knowledge and skill development among students, parents, and community leaders. To assess learning outcomes, participants complete pre- and post-event evaluations measuring changes in knowledge about root crops and their role in nutrition and food security. The overarching goal is to increase awareness, production, and consumption of sweet potato, tanier, and yam, positioning these crops as vital components of sustainable diets in Puerto Rico and the Caribbean.

OBJECTIVES

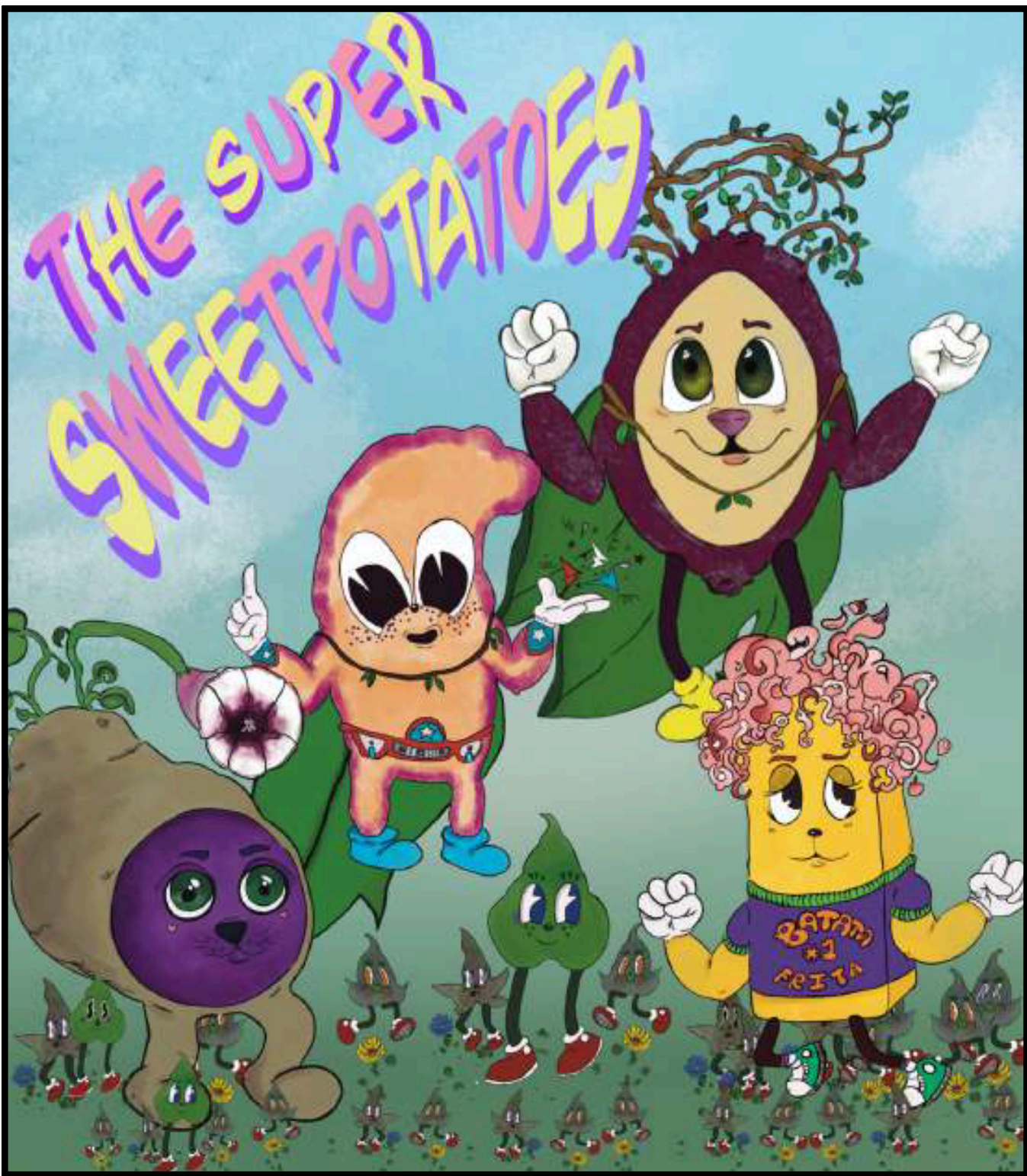
- Implementation of IPM practices to improve yield and commercial quality of sweetpotato (*Ipomoea batatas*), tanier (*Xanthosoma* spp.), and yam (*Dioscorea* spp.).
- Increase knowledge of production practices, nutritional and functional properties, and promote their consumption among youth and adults.
- Develop pocket guides and comic booklets.
- Educational campaign for elementary schools, 4-H youth, and the community, showcasing these root crops as the new superfoods for the Caribbean along with the main IPM practices for each crop.

THE EDUCATIONAL CAMPAIGN

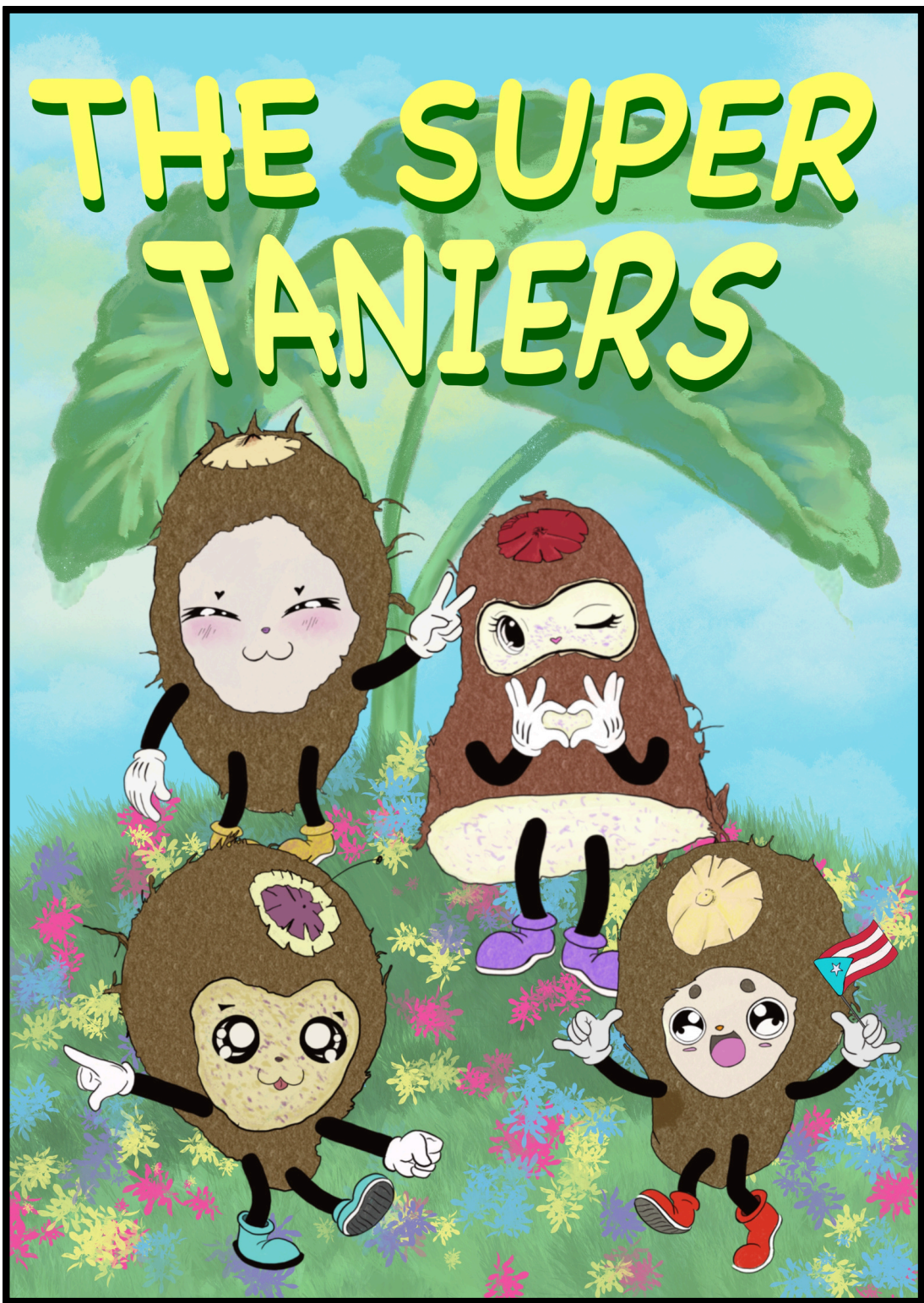


The campaign sought to increase awareness and encourage the consumption of sweetpotatoes, tanier and yam among children and youth in Puerto Rico and the broader Caribbean region. Developed in partnership with Family and Consumer Sciences Educators from the Agricultural Extension Service across the Island, each guide credits the educators involved in the initiative.

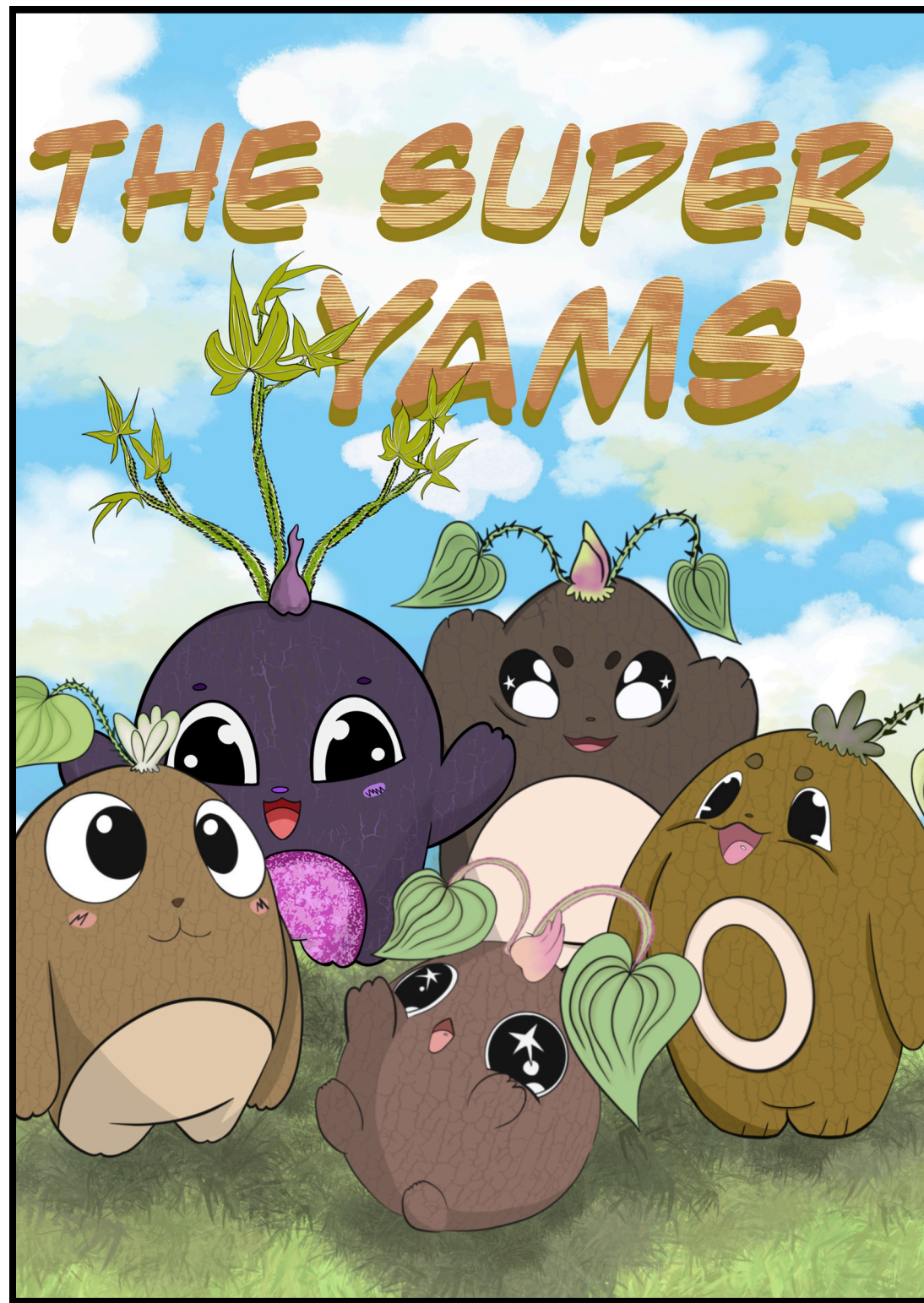
RESULTS/FINDINGS



Pocket Guide: Sweet Potato (*Ipomoea batatas*)



Pocket Guide: Tanier (*Xanthosoma* spp.)



Pocket Guide: Yam (*Dioscorea* spp.)

- Each pocket guide delivers insights on the crop and its integrated management techniques to improve quality and boost local production.
- In the comic, every character is introduced by their cultivar name, highlighting their unique powers, nutritional benefits, and functional properties.
- The sweetpotato guide is available online in Spanish, English, and French, while the Tanier and Yam guides can be accessed in Spanish and English, with French versions coming soon. All guides are freely accessible online.
- This campaign successfully engaged around 800 individuals across 25 municipalities, covering the northern, central, southern, eastern, and western regions of the island, including the US Virgin Island of St. Croix.

IMPACT OF THE EDUCATIONAL CAMPAIGN

- Workshops held at the University of Puerto Rico and the Culinary School of Puerto Rico in San Juan
- Engaging visits and presentations at secondary and elementary schools across the island
- Tours of family gardens, welcoming participants of all ages
- Interactive activities at the Botanical Garden with various 4-H groups and Master Gardener program volunteers
- Field days and seminars provided for students and faculty at the University of the Virgin Islands
- This campaign successfully reached around 800 individuals across 25 municipalities, spanning the north, central, south, east, and west regions of the island, as well as St. Croix in the U.S. Virgin Islands.

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