

PONGAMIA: AN ENVIRONMENTALLY FRIENDLY ALTERNATIVE CROP FOR CITRUS GROWERS

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Citrus growers in Southeast Florida are looking for alternative crops that could be planted in their current fallow lands and overcome economic losses from the citrus greening disease. Besides maintaining the Ag community's wellbeing, these alternative crops should require low water and nutrient inputs in order to promote environmental sustainability. Pongamia is a new alternative crop for citrus in the Indian River region that is adapted to the climate and conditions of the region. This crop can be planted in previous citrus lands without additional infrastructure or rigorous pest management investment. Pongamia is commonly known to be "lower maintenance crop" compared to citrus. However, there is no field-based scientific evidence that proves this in Florida. In this presentation, we show the preliminary findings of a Pongamia field trial at the Indian River Research and Education Center (IRREC) supported by SEEDIT UF IFAS that looks to provide a first draft of field management guidelines. The experiment evaluated three Pongamia varieties from Terviva and three irrigation scheduling techniques including soil moisture sensor-based, evapotranspiration based, and citrus growing calendar schedule. The water management practices were evaluated based on the plant and root physiological development, pathogens, and soil/water quality. The preliminary data obtained from this field trial will be used to inform existing and new Pongamia growers on the management practices required to maintain sustainable crops and will extend our understanding of Pongamia responses to the soil, water, climatic and potential biotic stresses in the region.

PRESENTER BIO: Fruit and Field Crops Multicounty Agent II. Working directly with Indian River and St. Lucie County commercial fruit crops producers as well as assisting Horticulture and Agriculture Agents. Dr. Rezazadeh's doctoral focus was on the influence of environmental factors and cultural practices on the physiology and development of greenhouse crops.