

# **The Promotion of Secondary Succession of Guam's Southern Badlands by Evaluating the Allochory Seed Dissemination of *Barringtonia asiatica*, *Bikkia mariannensis*, *Terminalia catappa*, and *Hibiscus tiliaceus***

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The failure to promote secondary succession in Guam's southern badlands creates an environmental hazard because continued erosion of the soil destroys our precious coral reefs. The overpopulation of brown tree snakes on Guam prevents and hampers successful seed dissemination of native plants by birds and other animals. Thus, the restoration of Guam's seed dissemination and the proper identification of native plants that would thrive in the brackish Terra Rossa would aid in the promotion of secondary promotion. First, this project evaluates the salinity levels of Ritidian, Matapang, Agana, and Merizo beaches and determined the growth of the following native strand plants: *Barringtonia asiatica*, *Bikkia mariannensis*, *Terminalia catappa*, *Hibiscus tiliaceus*. The goal was to identify which native strand plant/s can likely survive the brackish Terra Rossa. Second, this project evaluated the allochory seed dissemination by floating the seeds in saltwater. The purpose for the test was to replicate the seeds flotation in the ocean and to determine how long the seeds could travel in the ocean before sinking.