Ngawang Chime

Pollination Biology of *Scaevola plumieri Vieques,* Puerto Rico

Scaevola plumieri is a coastal shrub (Goodeniaceae family), native to indo atlantic and it is considered an endangered species in Cayman islands. On the other hand, *Scaevola taccada* is native to Indo Pacific and was introduced to the Caribbean in the 1970s. We are trying to understand why *S.plumieri* is surviving poorly while its sister species, *S.taccada* is having a better survival rate. We are interested in documenting pollinators visitations in both *S. plumieri and* S. *taccada* in Vieques Island, (Puerto Rico). The visitation rate was calculated by dividing number of pollinators on each flowers over a 15 minute period. Observational data including both the identification and frequency of different insect visitors suggests that the native *S.plumieri* attracts a greater diversity of pollinators than does *S.taccada*, and additionally, *S. plumieri* attracts native species whereas *S. taccada* attracts generalist pollinators. The key pollinators for both S.*taccada* and S.*plumieri* are *Centris decolorata*, *Apis mellifera*, *Xylocopa mordax, Campsomeris sp* and *S.sphecinae*. Three years of data concludes that in both 2015 and 2016, the pollinator visitation rate for S.*plumieri* was higher than *S.taccada* while for 2017 data, pollinator visitation rate for the *s.taccada* was higher. It was hard to see a clear pattern across the 3 year period because of the difference in rainfall pattern over three years.