

FLORAL DISPLAY AND POLLINATOR VISITATION IN *COMMELINA BENGHALENSIS* AND *C. REPTANS* FROM KENYA, Patrick J. Daly, Adriana Otero Arnaiz, Andrew Schnabel*, Indiana University South Bend, Department of Biological Sciences, South Bend, IN 46634, aschnabe@iusb.edu

Flowering plant species possess a variety of mechanisms to promote outcrossing. Inflorescences of *Commelina benghalensis* and *C. reptans* from Kenya produce cleistogamous and chasmogamous flowers that emerge one or two at a time from a subtending bract. Chasmogamous flowers display several different combinations of flower positioning and gender. Specifically, flowers with tall peduncles are male, and flowers with short peduncles are hermaphroditic. We hypothesized that these patterns are not random and are present to decrease the amount of self-pollination. To test this hypothesis, we observed floral displays and insect visitation in several populations at Mpala Research Center, Laikipia, Kenya. On average, 19% of *C. reptans* inflorescences and 36% of *C. benghalensis* inflorescences produced two flowers, with the upper flower being male and the lower flower being hermaphroditic. Observations of honeybee visitation (> 99% of all visits) for both species supported the outcrossing idea. The bees visited the hermaphroditic flower first 98% and 84% of the time in *C. benghalensis* and *C. reptans*, respectively, and then immediately visited the male flower before moving to the next flower. This would allow for deposition of pollen from different individuals onto the stigma of the hermaphroditic flower followed by gathering of fresh pollen to deposit on the next individual.