

Differences in pollination syndromes and the frequency of autonomous delayed selfing between co-flowering *Hibiscus aponeurus* (Sprague and Hutch) and *H. flavifolius* (Ulbr) from Kenya

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Many plant species have mixed mating systems and shift between producing outcrossed or self-fertilised seeds. Although selfing can reduce genetic variability and lead to the loss of adaptive potential, when potential mates are present at low densities, or when pollination rates are low due to the decline of suitable pollinators, self-fertilisation can provide reproductive assurance. Human activities that increase habitat fragmentation are severely reducing the size of pollinator populations and potentially increasing the risk of local extinctions. Therefore it is important to examine under which ecological conditions plant populations rely more heavily on self-pollination, and the extent in which this may impact their mating success. We examined the relationships among floral attraction, insect visitation, and delayed autonomous selfing in two coflowering and widely distributed African Malvaceae -*Hibiscus aponeurus* and *H. flavifolius*. We found important differences in the pollination syndromes of these two species that appear to reflect distinct evolutionary and/or recent ecological histories.



Fully dehisced *Hibiscus aponeurus* flower with orange pollen grains in some stigmas. A developing fruit can be seen behind the flower. Photo taken by Juan C. Ruiz Guajardo at the Turkana Boma plot, Mpala Research Centre, Laikipia, Kenya