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Sebastian J Schreiber* (sschreiber@ucdavis.edu), **Jay Rosenheim**, **Lawrence Harder**
and **Neal Williams**. *Pollen limitation in plants: Ecological and evolutionary perspectives.*

Sexual reproduction in plants often requires the transfer of pollen between flowers by environmental currents or pollinators (e.g., mainly insects, but birds, bats and other assorted species). When plants receive too little pollen, they may experience reductions in seed production and are considered pollen-limited. This limitation is a basic metric for assessing plants' sensitivity to environmental change like recent global declines in pollinators. To date, however, the frequency of pollen limitation as well as the evolutionary and ecological causes of pollen limited is debated. To provide new perspective on these issues, we use stochastic models to examine (i) how uncertainty of pollen availability simultaneously influences the evolution of reproductive allocations to attracting pollen, producing ovules, and provisioning for seeds, and (ii) the ecological consequences of these allocation strategies to seed production following sudden shifts in pollen availability or resource availability. (Received September 25, 2012)