

Factors affecting pollinator movement and plant fitness in a specialized pollination system

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The rate of pollen exchange within and among flowers may depend on pollinator attraction traits such as floral display size and flowering plant density. Variations in these traits may influence pollinator movements, pollen receipt, and seed number. To assess how floral display size and flowering plant density affect parameters of pollinator visitation rate, pollen receipt per flower, seed number per fruit and the between-plant pollinator movements, we studied the self-incompatible plant, *Nierembergia linariifolia*. Per-flower pollinator visitation rate and bout length increased linearly with increasing floral display size. Pollen receipt per flower increased linearly with increasing flowering plant density. For seed number per fruit, a polynomial model describing an increased seed number per fruit at low density and a decreased seed number per fruit at high density provided a significant fit. Per-flower pollinator visitation rate was not associated with pollen receipt per flower and see