

Rare cliffhanging plant species uses unique reproductive strategy

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The *Borderea chouardii* plant, which is critically endangered and is found only on two adjacent cliff sides in the Pyrenees, employs a unique and risky doubly mutualistic reproductive strategy with local ants, according to research published Sep. 12 in the open access journal *PLOS ONE*.

The researchers, led by Maria Garcia of the Pyrenean Institute of Ecology (CSIC), found that two [ant species](#) acted as the main pollinators for the plant, while a third species dispersed seeds. About a third of the new seedlings censused over 17 years in vertical cliffs would come from such dispersal, while the remaining two thirds from self-sown seeds by the female plants.

Such a strategy is risky, because if something were to happen to the local ant species the plant may not be able to continue reproducing, but the authors conclude that it can be successful in this particular case because of the plant's unusually long lifespan, in some cases reaching over 300 years, its climatically stable habitat, and its isolation from large herbivores.

More information: Garcia MB, Espadaler X, Olesen JM (2012) Extreme Reproduction and Survival of a True Cliffhanger: The Endangered Plant *Borderea chouardii* (Dioscoreaceae). PLoS ONE 7(9): e44657. [doi:10.1371/journal.pone.0044657](https://doi.org/10.1371/journal.pone.0044657)

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