

# Ecological factors affecting gene flow between populations of *Anarthrophyllum cumingii* (Papilionaceae) growing on equatorial- and polar-facing slopes in the Andes of Central Chile

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In the Andes of Central Chile, flowering commences 1-2 months earlier on equatorial-(north-) facing than on polar- (south-) facing slopes, and pollinator assemblages also differ between these habitats. In order to understand the potential influence of these differences on gene flow, we monitored flowering periods and insect visitation rates to flowers of 60 individuals of *Anarthrophyllum cumingii* (Papilionaceae) on two equatorial- and two polar-facing slopes in the Andes of central Chile (33°35' S;70°32' W). Flowering began about 30 days earlier on equatorial-facing slopes. Flowering periods of individuals on slopes with the same aspect had a mean overlap of 0.52, while those on opposite slopes had a mean overlap of 0.15. On equatorial-facing slopes *Yramea lathionoides* (Lepidoptera) accounted for 60% of the visits to flowers of *A. cumingii*, while on polar-facing slopes *Centris cineraria* (Hymenoptera) was responsible for more than 80% of flower visits. Average similarities of visitor ass