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PLANT REPRODUCTION IN THE SUBANTARCTIC

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Many studies have shown that for plants growing in alpine and high latitude environments sexual reproduction is not an important life history trait. This study investigated reproductive ecology of the vascular flora of Macquarie Island, to identify the reproductive traits of plants in a subantarctic environment. The study identifying that 72% of the total vascular flora flowered, 61% dispersed seed and 33% produced seedlings during the study (18 months). The island climate is constant with very little intra-annual variation, despite this, there was strong seasonality in plant reproductive performance. Almost all species flowered and produced fruit in spring and summer. Seed rain studies identified variation in species dispersability, and showed that species distribution and abundance across the island were reflected in the seed rain. The life history traits of megaherbs were determined, highlighting how they survive and dominate in a subantarctic environment. Sexual reproduction was determined an important life history trait for many plant species growing on subantarctic Macquarie Island.