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## Digitising the seeds of Hawai‘i

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Seed banks are critical resources for ex-situ conservation and biological research. They are one of the most prevalent and practical approaches to conserving resources used for habitat restoration and conservation of wild species. Despite seed collection's utility for research, limitations in terms of accessibility do exist. Travel restrictions, such as time and funding, might impede researchers from accessing seed collections for in-person visits. Further, many seed collections across seed banks and herbaria are not digitised (i.e., imaged or databased) or are photographed insufficiently for identification. However, technological advances, such as Z-stacking software that can increase the depth of imagery and artificial intelligence, have been applied to quantify specific trait data. At the Harold L. Lyon Arboretum in Honolulu, Hawai‘i, a curation project was initiated to generate multi-focal images of all 141 genera (spanning 63 families) currently held in the Seed Conservation Lab and uploaded onto a newly developed website: *SeedsOfHawaii.org*. These images and associated metadata provide the raw material for language learning models. Utilising developed AI algorithms, we aim to assist researchers in species identification, tracing populations, and predicting future trajectories of adaptation. This is a relatively untapped area of exploration as it concerns the use of Hawaiian plant data for local and global species restoration. By integrating our website into the global compendium of botanical data, we contribute to the collective understanding of plant biodiversity, empower researchers to train their algorithms, refine models, and invite collaboration. Seed banks that digitise their collections through modern imagery can expand their utility and use for reference further than physical collections by increasing their visibility through online availability.