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***Ex situ* orchid conservation at the Botanical Garden Organization (BGO)**

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The Botanical Garden Organization (BGO) was established in 1992 with the Queen Sirikit Botanic Garden (QSBG) as its headquarters. Currently, there are five gardens located in all the floristic regions of Thailand. The orchid flora of Thailand is highly diverse, comprising nearly 1,300 species. However, the illegal harvesting of wild orchids, habitat loss, and climate change have dramatically diminished species numbers and the abundance of wild orchids in Thailand, leading to many orchid species becoming rare and threatened. Therefore, orchids, especially native Thai orchids, are a focal group for *ex situ* conservation efforts aimed at preserving their genetic resources and preventing their extinction. BGO has undertaken various *ex situ* orchid conservation initiatives, including the establishment of living collections, *in vitro* cultures, and cryopreservation. Presently, 1004 species in 196 genera are being preserved in BGO's living collection and at least 370 species are stored as *in vitro* cultures. Of the species in the living collection, 667 are native to Thailand, accounting for 50% of the Thai orchid flora, and 337 species are introduced species. The two largest genera of native Thai orchids in our living collection are *Dendrobium* (111 species) and *Bulbophyllum* (107 species). Ongoing experiments on selected *Paphiopedilum* and *Dendrobium* species primarily focus on the preservation of seeds and pollinia using cryopreservation techniques. The orchid collection at BGO serves purposes such as taxonomic research, exhibitions, propagation and re-introduction programmes. Current research projects at BGO mainly concentrate on epiphytic orchids. In the future, the scope of projects will expand to include the conservation of terrestrial orchids, the development of preservation methods, and the establishment of suitable management practices and policies for *ex situ* orchid conservation. Additionally, collaborations with local communities will be established to promote the conservation and sustainable utilisation of native Thai orchids.

Keywords: orchid conservation, *ex situ* conservation, living collections, *in vitro* culture