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BGANZ – New Zealand Regional Group

Botanic Gardens New Zealand and Australia

Ministry of Primary Industries
Plant Imports
PO Box 2526, Wellington 6140, New Zealand

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Consultation feedback on the suspension of unused or out-of-date nursery stock import pathways and reformat of nursery stock import health standard.

Overview

Botanic Gardens Australia and New Zealand (BGANZ) welcomes the opportunity to provide a submission on the Ministry's proposed changes to the import health standard Importation of Nursery Stock. BGANZ is the peak body representing botanic gardens and arboreta that work to conserve, manage, and restore plant biodiversity. We represent our members and supporters to grow their impact, capacity, and influence plant conservation to achieve a healthy and resilient New Zealand and Australia.

Summary

At a time of

- global biodiversity crisis
- global climate crisis
- increasing food insecurity and poverty crisis

it is more important than ever to work together to protect, conserve and research global plant diversity and to educate the broader community on the value of our flora, both native and exotic. The global botanic gardens network is a significant player in supporting this.

Botanic Gardens Conservation International (BGCI), the global botanic gardens body connects over 3,500 botanical institutions worldwide. BGANZ, the regional peak body for New Zealand and Australia, has over 120 member organisations and is part of this global network. Together they create mega collections that assure the survival of our plant species.

"The world's botanic gardens contain at least 30% of all known plant species, including 41% of those classed as 'threatened', according to the most comprehensive analysis to date of diversity in 'ex-situ' collections" (https://www.cam.ac.uk/research/news/worlds-botanic-gardens-contain-a-third-of-all-known-plant-species-and-help-protect-the-most).

Furthermore, data gathered by BGCI and partners shows that 30% of the worlds tree species are held in botanic gardens and seedbanks, including 21% of the world's threatened trees. Globally 30 % of all tree species are now threatened in their native habitat. 142 tree species have already become extinct in the wild, 41 species are only known from ex-situ botanical collections.

New Zealand's botanic gardens are well placed to lead ex situ plant collections for the conservation of species at a local and international level and to collaborate with other gardens to address some of our global challenges. This does however require the ability to import seed and plant material and the proposed suspensions of the extensive list of nursery stock will inhibit this vital work.

Concerns lie with the blanket approach to suspend pathways that are not used and/or are out of date. Because a genus has not recently been imported, does not preclude there from being a future purpose to. An example is several decades ago a native broom was found to be extinct in New Zealand, *Carmichaelia prona.* The Royal Botanic Gardens Edinburgh in Scotland was found to have had plant material that enabled New Zealand to bring it back into cultivation here. With increasing pressures on our environment, including climate change, we anticipate there being a greater need for sharing plant material across countries.

"In the next 50 years, 20-50% of plants in botanic gardens and urban landscapes will face temperatures never experienced before" (Dr Dave Kendal, Senior Lecturer in Environmental Management, University of Tasmania). https://www.bgci.org/news-events/the-climate-risk-assessment-tool-project/. In response the Climate Change Alliance of Botanic Gardens recently created a Climate Resilience Assessment Tool to help in the selection of the most suitable tree species for different climate change scenarios. New Zealand has not had the opportunity to extensively utilise this, but it will be a valuable tool for our urban landscapes in particular, helping to find future street trees for changing climates. Without knowing which trees we should be selecting it is difficult to advise on the proposed suspending of all the genera currently listed.

Additionally, while seed is usually the preferred method of importing, there are times when only plant material would support the desired outcome, such as working with cultivars, genotype work, material that is hard to set viable seed etc.
Research has found that 36% of critically endangered species produce recalcitrant seeds, meaning seed banking alone is not sufficient to conserve the world's threatened plant and tree species (Nature Plants | VOL 4 | NOVEMBER 2018).

We recognise that suspension is not permanent and a genus may be reassessed in the future, but given the time sensitivity of many threatened taxa, or urgent action required to mitigate climate change or supporting other research, the lengthy process that would be required to reinstate a genus could be detrimental to their survival or the research value New Zealand could be adding.

Recommendations

To enable Aotearoa's botanic gardens to continue to play an active role in the conservation, research and education of plants, we recommend the following:

- Any IUCN, national or regional red listed genera or species on the “to be suspended” list are removed and kept listed for import
- Any near threatened genera or species on the “to be suspended” list are removed and kept listed for import
- Consideration is given to develop a conservation and research verse commercial import list
- Exemptions are made for botanic gardens to import plant material from the suspended list to ensure Aotearoa remains relevant in a global context of plant conservation.

ABOUT BGANZ

BGANZ is the peak body representing botanic gardens across New Zealand and Australia. With over 160 members, 90+ of which are botanic gardens and arboreta, we aim to create a future where plants are valued and protected, ensuring a greener, healthier and more resilient world for generations to come.

Our New Zealand members include:

Auckland Botanic Gardens
Christchurch Botanic Garden
Dunedin Botanic Garden
Wellington Botanic Gardens
Eastwoodhill National Arboretum of NZ
Oamaru Public Gardens
Percy Scenic Reserve
Queens Park, Invercargill
Taranaki Regional Council
Timaru Botanic Gardens

Botanic gardens are institutions holding documented collections of living plants for the purpose of scientific research, conservation, display, and/or education. Their position today as leaders of sustainability and voices on climate change is comparable to the modern role of zoos, with an emphasis on conservation effort and securing wild populations. They are insurance policies, safeguarding our plant biodiversity through ex situ living collections including seed banks, and rewilding after natural disasters or in restoration projects. They provide scientific knowledge critical to climate adaptation, disease and pest management, building resilient strains and have extensive horticulture expertise relevant to commercial and non-commercial plant species.