

APP204280 – NZPPI Application for 11 tupu-ā-whare / houseplant species

Content of summary

The application is for 11 tupu-ā-whare / houseplant species: two are completely new to New Zealand and nine are already present but not approved for propagation and sale. The plant species are small-growing, sub-tropical species with highly ornamental foliage (see Appendix 1). They make popular house plants, tolerating low-light environments and small containers.

The applicant is New Zealand Plant Producers Inc. (NZPPI), the industry body for plant nurseries and related businesses.

A weed risk assessment considered how the plants reproduce, spread and persist in the environment, the suitability of climate and habitats in Aotearoa New Zealand, and history of invasiveness elsewhere in the world. All plant species scored negligible weed potential risk.

The expected benefits to New Zealanders, society and the economy from approving these plants are enhanced mental and emotional well-being, and greater access to desirable, quality plants at affordable prices, creating jobs and tax revenue, and saving government compliance time and resources.

The application

The applicant is New Zealand Plant Producers Inc. (NZPPI), the industry body for plant nurseries and related businesses. Our members produce the plants that grow the food Kiwis eat and export, the plants for re-clothing Papatūānuku and regenerating our forests, the plants that sustain our urban landscapes and backyards, and the tupu-ā-whare / houseplants that people care for in their homes and indoor environments.

NZPPI is based in Wellington and advocates on behalf of our members on biosecurity, plant imports, sustainability, workforce and training, health & safety, and land and water issues.

This application is for 11 tupu-ā-whare / houseplant species (see Appendix 1). Two species are new to New Zealand. Nine species are already present in New Zealand but did not make it onto the list when the HSNO Act came into force in 1998. They are present in botanic gardens and private collections, and many are often seen for sale on Trade Me, Facebook groups and other social media platforms.

The plants

The plant species are all small-growing, sub-tropical species with highly ornamental foliage. They make popular house plants, tolerating low-light environments and small containers. They originate from hot and humid rainforests in Central & South America and southeast Asia. In their native habitats, they grow in very different climates and niches to those in Aotearoa New Zealand, but they adapt well to indoor container-growing with careful attention to temperature and the amount of light, water and humidity they receive. Some species are more difficult to look after, however this challenge brings its own rewards to owners who adore these plants for their good looks.

Environmental risks

NZPPI acknowledges the special relationship iwi/Māori have with the environment. Aotearoa New Zealand has a history of new plant introductions which have escaped into the environment and become naturalised or invasive in important habitats and landscapes. Such weeds can negatively impact the relationship of Māori to the environment and rongoā Māori.

We used the weed risk assessment tool developed by Department of Conservation weed scientists (Williams *et al.*, 2005), to assess the weed-risk potential and environmental risk of these 11 tupu-ā-whare / houseplant species. The assessment looked at how the plants reproduce, spread and persist in the environment, whether there is suitable climate or environmental conditions in New Zealand, and whether there is a history of invasiveness elsewhere in the world (including the species itself, as well as other members of the genus and family). All plant species negligible scores for weed risk potential in Aotearoa.

All applicant species are subtropical/ tropical species that originate from humid, warm rainforests. Each of these species have relatives which have been present as ornamental plants in New Zealand for at least 50 years (Gee, 2020), and there are no records of naturalisation or establishment of self-sustaining populations. The applicant species do not possess traits that increase the risk of establishment compared to species which have been present in New Zealand for decades.

The five *Peperomia* species are small clumping or trailing plants with moderate growth rates. In their countries of origin, they occupy tropical and sub-tropical habitats on the forest floor or in the tree canopy. They are not adapted to the coastal environments of the New Zealand native species of *Peperomia* and will not compete for these habitats. They have been reproductively isolated for millions of years so they cannot cross-pollinate and hybridise with the NZ species.

The other six species grow or spread very slowly, and are fussy about light, water and humidity, and temperature requirements. Their slow growth and fussy requirements mean they present a low risk to the environment if grown outdoors, though it is unlikely owners would risk their 'good looks' by planting in unprotected outdoor environments, even in the winterless north.

Expected benefits

Tupu ā-whare/houseplants contribute positively to indoor living environments and create a sense of connectedness to nature, improving taha hinengaro/mental health and well-being.

Indoor plants have undergone a huge revival in the past five years in Aotearoa New Zealand. NZPPI member Maree Wiki (Te Aupōuri) is the owner of plant store Flora and Co in New Plymouth and has spent almost 25 years working in horticulture. She links the rise in popularity of indoor houseplants to social media, the Covid-19 pandemic (people spending more time and money on their home) and lifestyle changes. Many people are renting in cities and in flats which don't allow pets so houseplants have become something that they can care for.

New Zealanders will benefit from access to high-quality, healthy plants which they can buy from their local retailers at affordable prices. Commercial plant producers have done the mahi to develop the skills and business practices to produce high-health, quality plants in volumes that make them affordable to the general public, while creating additional jobs within the industry. Toni Austen (Te Aupōuri) has recently started up a nursery in Kaitaia to grow rare and unusual plants and thinks the growing climate in the winterless north is perfect for Māori enterprise to grow plants for the houseplant market. Maree Wiki is also encouraging whanau to grow houseplants, in addition to the native plants they are already growing for restoration and planting projects.

Approval of these species would enable the nine tupu- ā -whare / houseplants that are already present in Aotearoa to be legally propagated and sold. The Ministry for Primary Industries spends a considerable amount of time responding to public enquiries about their legal status and availability, adding up to hundreds of hours every year (C. Bleach, 2021, pers.com). Society would benefit from clarification of their legal status and availability, saving MPI resources that could be spent elsewhere. A further application to MPI would be needed for the two new to New Zealand *Peperomia* species before they could be imported.

There will be additional economic benefits to the country through additional jobs in plant production and retail. Commercial plant nurseries employ New Zealanders and generate tax revenue (income tax and Goods & Services Tax (GST)) which benefits Aotearoa New Zealand.

Appendix 1: The applicant plant species

1. *Alocasia micholitziana* originates from southeast Asia and has arrow-shaped leaves with thick white veins on a dark green velvet leaf surface.



2. *Anthurium clarinervium* is popular for its dark green, deeply lobed heart shaped leaves and contrasting white veins. It has a limited natural distribution in southeast Mexico.



3. *Anthurium veitchii* (King Anthurium) is a slow-growing epiphytic plant originating from Colombia, with huge, corrugated leaves growing up to 2 meters long.



4. *Goepertia bella* originates from south-eastern Brazil and has highly ornamental, light green oval leaves with intricate, mosaic-like leaf markings.



5. *Goepertia orbifolia* originates from Bolivia and has oversized, rounded leaves which are striped with silvery bands.



6. *Macodes petola* is a small orchid from southeast Asia and the Pacific, with dark green, velvety leaves with a netted pattern of markings which sparkle in sunlight. It has fussy requirements but makes an excellent plant for small glass terrariums.



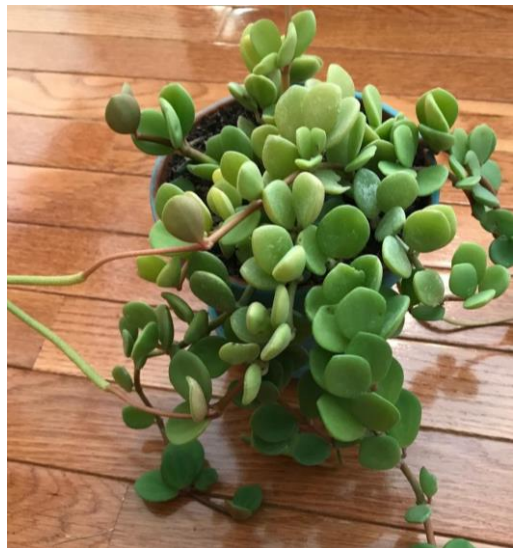
7. *Peperomia albovittata* (new to NZ) is a tropical/sub-tropical epiphyte native to Ecuador. It is easy-care with small, heavily textured green leaves that are slightly pointed at the tip.



8. *Peperomia arifolia* originates from Bolivia and Brazil. It is an easy-care houseplant with small, succulent leaves with lightly textured stripes, that can be silvery coloured in some cultivated varieties.



9. *Peperomia pecuniifolia* originates from Guatemala. It is easy-care with deep-green, succulent leaves and a trailing growth habit.



10. *Peperomia quadrangularis* (new to NZ) is native to northern South America, from Brazil to Venezuela. It is easy-care with small, deep green leaves with lighter coloured stripes that look like a watermelon.



11. *Peperomia rotundifolia* originates from Mexico to South America and Brazil. It is easy-care with small, rounded leaves which look like thin coins, and an attractive trailing growth habit.

