



**Parliament of Australia
Attorney-Generals Department
Criminal Justice Division**

Discussion Paper

**Implementation of model schedules for
Commonwealth serious drug offences**

A Submission by

Nursery & Garden Industry Australia (NGIA)

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Supporting Organisations

The following organisations have endorsed this submission.



**Australian Institute of Landscape Design
and Management**



**Australian
Institute of
Horticulture
Inc.**

Australian Institute of Horticulture Inc.



**Institute of Australian Consulting
Arboriculturists**



National Interior Plantscape Association

NGIA submission in response to the discussion paper - Implementation of model schedules for Commonwealth serious drug offences

Nursery & Garden Industry Australia (NGIA) welcomes the opportunity to make a submission to the discussion paper *Implementation of model schedules for Commonwealth serious drug offences*. Nursery & Garden Industry Australia is the peak national industry body representing producers, retailers and allied traders involved in the production of plants across all states and territories of Australia. In partnership with state and territory peak bodies, NGIA is responsible for overseeing the national development of the Australian nursery industry. The nursery industry is a significant sector of the Australian horticultural industry and employs over 45,000 people in more than 20,000 small to medium sized businesses with a combined supply chain market value in excess of \$15 billion annually. Table 1 shows the wide range of end users supported by the nursery industry.

Table 1: National value of horticultural sectors supplied by production nurseries

Production Nursery	Horticultural markets	Economic value
Container stock ¹	Ornamental/urban horticulture	\$2 billion retail value
Foliage plants ¹	Indoor display/hire	\$87 million industry
Seedling stock ²	Vegetable growers	\$3.3 billion industry
Native and exotic forestry stock ³	Plantation timber	\$1.7 billion industry
Fruit and nut tree stock ²	Orchardists (citrus, mango, etc)	\$5.2 billion industry
Landscape stock ¹	Domestic & commercial projects	\$2 billion industry
Plug and tube stock ²	Cut flower growers	\$700 million industry
Revegetation stock ¹	Farmers, Government, Landcare	\$109 million industry
Mine site revegetation	Mine site rehabilitation	Value unknown
Total Horticultural Market Value		\$15.0 billion

¹ Freshlogic (2008) Australian Garden Market Monitor for the Year Ending 30 June 2009

² Horticulture Australia Limited (2004) Australian Horticultural Statistics Handbook

³ Australian Bureau of Agricultural and Resource Economics (2008). Australian Forest and Wood Products Statistics

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Upon reviewing the *Implementation of model schedules for Commonwealth serious drug offences*, NGIA believes that changes to the model schedule, particularly in relation to the expanded list of 'controlled plants' would have a significant impact on nursery businesses, individuals in the wider Australian gardening public and the Australian economy. It will also impact on other important sectors including landscape designers and contactors, parks and gardens personnel, indoor plant hire businesses, Landcare and Bushcare groups as well as botanists and plant collectors. As such, NGIA does not support the expanded list of categories for several reasons outlined in this submission. Having said this, it should be made clear that NGIA does not support the consumption of any plant material other than those deemed safe for human consumption (e.g. fruit, vegetables and culinary herbs)¹. It should also be noted that the Australian nursery and garden industry has not provided a formal position to this discussion paper previously, nor has it been invited to provide input through consultation in the development of the model schedules. This is disappointing considering the ramifications of this proposal as outlined in our submission below.

NGIA has several concerns in relation to the discussion paper that principally relate to the inclusion of the expanded list of plants in Part E and outlined in **Attachment 2.4: The Model Schedules – List of Controlled Plants**.

Principally, the discussion paper fails to adequately detail the reasoning behind the perceived risk associated with cultivating, selling or possessing many of the plants listed under Part B of Schedule II. Moreover, NGIA is not aware of epidemically increasing misuse of any plants captured by this expanded list of plants, and requests the provision of information to suggest otherwise.

NGIA is gravely concerned about the approach detailed in this discussion paper. Blanket banning species, as set out in this discussion paper would have significant ramifications. Indeed, there would be much confusion in terms of what plants can't be cultivated and

¹ Nursery & Garden Industry National Plant Labelling Guidelines (2009)
http://www.ngia.com.au/docs/pdf/your_associations/NGIA_Labelling_Guidelines_AUG07v1.1.pdf accessed March 10, 2011.

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sold due to their 'controlled' listing. There would be even greater confusion amongst the wider gardening Australian public in terms of understanding these changes due to the limited horticultural understanding that exists in the community. NGIA does not accept a blanket ban approach and furthermore, NGIA is disappointed to see that taxa have not been identified and listed by their complete botanical names (genus, species, and, when appropriate, cultivar and their taxonomic synonym). The lack of detailed information in terms of which taxa are known to contain commercially viable quantities of controlled substances, and for which there is evidence of an illicit market is concerning.

NGIA pose the question, is there a definitive scientifically based list of species that contain mescaline and DMT? Indeed, should a expanded list of controlled plants exist as proposed in this discussion paper, then NGIA believes the offenses of their commercial cultivation, sale, or possession for commercial cultivation should be linked explicitly to actual illicit drug-related activities, to avoid criminalizing nursery businesses cultivating, selling and possessing the plants for other, legitimate purposes. This same reasoning should also be applied to the wider Australian gardening public. This suggestion is detailed further in our submission.

In compiling this submission, a thorough literature search to determine what plants contained mescaline and DMT revealed evidence to suggest that several plants would indeed fall within these two categories alone. This contradicts statement 57 under Section E where it notes 'an additional eight plant' would be picked up under the proposed changes. Plants that contain DMT include *Petalostylis labicheoides* var. *casaeoides* Benth (Butterfly bush)² found in remote Australia as well as several Acacias including *Acacia maidenii* Muell. (Maidens wattle)³ and *Acacia harpophylla* F. Muell. (Brigalow)⁴, both native to Australia and found extensively across the east coast. Another significant plant

² H Boit (1961) *Ergebnisse der Alkaloid-Chemie bis*. (Akademie-Verlag: Berlin 1961.). Page 47.

³ J Fitzgerald and A Sioumis (1965) *Alkaloids of Australian leguminosae V. The occurrence of methylated tryptamines in *Acacia maidenii**. *Australian Journal of Chemistry*, Volume 18, Pages 433–434.

⁴ S Johns, J Lamberton and A Sioumis (1966) *Alkaloids of the Australian leguminosae*. *Australian Journal of Chemistry*, Volume 19, Pages 1539-1540.

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worth mentioning is *Phragmites australis* cav. *australis* (Common reed) where rhizomes are reported to contain low concentrations of DMT⁵. This plant is wide spread across Australia and is considered a potential species in the rehabilitation of heavy metals from heavy metals contaminated soils⁶. With regards to plants that contain mescaline, a thorough literature search conducted by NGIA revealed multiple cacti taxa that under the expanded plant list of controlled plants would become prohibited from cultivation and sale in production nurseries and garden centres across Australia. They would also be prohibited from growing in Australian backyards. This includes four taxa/cultivars of the subgenus *Trichocereus* of the genus *Echinopsis* (Cactaceae), ⁷ *Lophophora williamsii* (Peyote Cactus) as well as *Opuntia basilaris* (Beavertail Cactus), *Stenocereus treleasei* (Tunillo) and *Polaskia chende* (Chinoa)⁸.

The significance of this in relation to the proposed inclusion of these plants on the expanded plant list is three fold. Firstly, many plants that fall on this list are indeed endemic plants that are native to Australia (e.g. several *Acacia* taxa as listed above). Furthermore, in addition to being cultivated in production nurseries across Australia, many of these taxa are already prevalent in the landscape and contribute greatly towards biodiversity should the potential for indigenous peoples and plant use not also be considered. An important aspect to consider when discussing biodiversity is the role of ecosystem services. These services provide the necessities for human health and wellbeing with many of these benefits associated with green-life⁹ including:

⁵ G Wassel, S. El-Difrawy and A Saeed (1985) Alkaloids from the rhizomes of *Phragmites australis* Cav. Scientia Pharmaceutica, Volume 53, Pages 169–170.

⁶ Z Ye, A Baker, M Wong and A Willis (1997) Zinc, lead and cadmium tolerance, uptake and accumulation by the common Reed, *Phragmites australis* (Cav.) Trin. ex Steudel. Annals in Botany, Volume 80, Pages 363–370.

⁷ O Ogunbodede, D McCombsa, K Troutb, P Daleyc and M Terry (2010) New mescaline concentrations from 14 taxa/cultivars of *Echinopsis* spp. (Cactaceae) (“San Pedro”) and their relevance to shamanic practice. Journal of Ethnopharmacology, Volume 131, Pages 356–362.

⁸ W Ma, X Jiang, R Cooks, J Mc Laughlin, A Gibson, F Zeylemaker and C Ostolaza (1986) Cactus alkaloids. Lxi. Identification of mescaline and related compounds in eight additional species using TLC and MS/MS. Journal of Natural Productivity. Volume 49, Pages 735–737.

⁹ S Cork and D Shelton (2000) Sustainable Environmental Solutions for Industry and Government. Proceedings of the 3rd Queensland Environmental Conference, May 2000, Environmental Engineering

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- Improved air quality through interception of pollutants and oxygen production
- Production of food and natural fibre for humans
- Provision of habitat for plants and animals
- Consumption of CO₂ through photosynthesis
- Carbon sequestration
- Maintaining ground water hydrology
- Stabilisation of climate
- Maintaining soil organic matter
- Enhancing soil nitrogen and recycling of nutrients
- Provide a sense of place
- Enhanced aesthetics

To this end, it is imperative to preserve these ecosystem services by preventing and/or minimising biodiversity decline. This proposal may inadvertently lead to biodiversity decline, which is alarming considering the move towards a carbon constrained economy.

Secondly, with many of the proposed 'controlled plants' prevalent throughout the landscape as well as in backyards across Australia, coupled with the lack of a definitive list of species that contain DMT or mescaline, there should be a requirement for a 'legitimate use defence'. How will the wider Australian public as well as those responsible for managing crown land, national parks and other areas of green space familiarise themselves with the litany of plants this proposal captures? It is likely that further scheduling of plants in this proposal will add to confusion and may also translate into inadvertent prosecution of law abiding Australian citizens.

In response to 'Question L', the 'Legitimate use defence – plants' clause outlined in statement 90, NGIA believes this clause is grossly inadequate in capturing this issue as

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botanists and plant collectors are only one category of legitimate users of these plants. Furthermore, statement 90 considers cultivation of hemp for fibre or other legitimate uses, however fails to adequately discuss cultivation of other plants that fall under the expanded list of prohibited plants from both a commercial as well as environmental perspective. Should the expanded list proceed, NGIA believes that a legitimate use defence should apply for growers of ALL plants captured by this list. For example, nurseries that stock *Phragmites australis* *cav. australis* will suffer as they will be prohibited from cultivating and selling this species. Moreover, the use of this species in the environment, for rehabilitation of eroded landscapes and contaminated soils as well as filtering water in wetlands signifies an additional 'legitimate use' that will also be prohibited. This species alone will see several nurseries impacted, including Greening Australia Nursery, QLD ¹⁰, Provincial Plants and Landscapes Nursery ,ACT ¹¹ and Impact Grasses, QLD ¹² to name a few.

Thirdly, several of the plants that would be captured under the proposed expansion of the plant list have undergone many years of plant breeding and investment and from a conservation perspective; there would be great losses in genetic material. For example, in the case of Brugmansia, there are 5 species and approximately 20 cultivars grown in Australia that have been carefully bred and cultivated for their flower attributes such as colour, scent and shape¹³. These plants are sought after by botanists, plant collectors and considered rare and unique from a conservation perspective.

On a separate note, the inclusion of Brugmansia and Datura in the expanded list appears contradictory as the alkaloids found in these species, Scopolamine and Hyoscyamine are

¹⁰ Greening Australia Nursery QLD http://www.qld.greeningaustralia.org.au/gaqotsasp/07_plant_search/species.asp?page=7 accessed March 11, 2011.

¹¹ Provincial Plants and Landscapes Nursery ACT http://plantsandlandscapes.com.au/prov_site/Phragmites_australis accessed March 11, 2011.

¹² Impact Grasses QLD <http://www.impactgrasses.com.au/product.php?productid=4> accessed March 11, 2011.

¹³ Personal Communication, Steven Prowse, Sacred Garden Angel's Trumpets, 4 March 2011.

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not listed as controlled drugs or precursors. Indeed Scopolamine is often used to treat motion sickness, nausea and intestinal cramping. Consequently, NGIA believes these species should be omitted from the expanded list.

In summary, NGIA believe the expanded list of plants as detailed in this discussion paper is inappropriate and would have huge repercussions on the Australian nursery industry and the wider gardening public. These changes would only result in added confusion, and would restrict the trade of many ornamental taxa, including several Australian natives. The proposed schedules would also have a devastating impact on the environment from both a biodiversity and conservation perspective. Lastly, if the changes were enacted, many members of the general public as well as nursery businesses could inadvertently become criminals tying up much needed resources from other more pressing law enforcement matters.



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