

Paper Profile:

'It was no accident: deliberate plant introductions by Australian government agencies during the 20th century.'

CSIRO Sustainable Ecosystems, Darwin



Summary of a paper published in the Australian Journal of Botany (54: 601-625), by Dr Garry Cook and Lesley Dias, 2006

The issue

The weedy potential of deliberately introduced plants has been a growing concern in Australia since the late 1980s. Although introduced plants are critical to Australia's agricultural and livestock production, many species that were praised in the past have now been declared agricultural and environmental weeds.

This paper documents some of the scientific developments and debates that affected the plant-introduction program, highlights issues to be recognised and argues that further developments in weed science and policy need to be informed by a better understanding of plant-introduction history.

The Key Concerns

Ignorance among weeds researchers

Despite the concerns, weeds researchers appear largely ignorant of the magnitude and intent of plant introductions for agricultural purposes as well as the legacy of unwanted plants. For many species that were documented and introduced for agricultural purposes, it is claimed in the weeds literature that their origin was accidental. This means that resources for preventing the future outbreaks of new weeds may not be allocated wisely.

Magnitude of past plant introductions

For over 70 years, Commonwealth Plant Introductions comprised 145 000 accessions of more than 8200 species. These species include more than 2200 grass and 2200 legume species, representing about twice the indigenous flora in those families and about 22 and 18%, respectively, of the global flora of grasses and legumes.

Legacy of past plant introductions remains

For most of the 20th century, these and other introductions warranted research into continental-scale transformation of Australian landscapes. This was done to support greatly increased pastoral productivity in order to achieve policy goals of maximum human population density. Although attitudes to Australian landscapes and economic and political imperatives have altered substantially since, the legacy of previous plant introductions remains.



Prevalent African weed Gamba grass can reach up to 5m in the tropical wet season of Northern Australia. It spreads virulently forcing out native grass species and fuels intensely hot fires in the dry, dangerous for native flora and fauna.

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