

BAMBOO - POTENTIALLY USEFUL PLANTS AND POTENTIAL WEEDS

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In many other countries (South America, Africa and Asia) bamboo is not generally considered a problem plant to the extent that it is here in Australia. Bamboo has an existential place in the lives of people. Bamboo is harvested for food, fibre, timber and as a raw material for art and craft. Where bamboo has a long cultural, spiritual, functional and amenity value it can hardly be considered a weed. In this case its most active predators are people.

In Australia bamboo has no functional profile in our everyday lives or in the non-aboriginal cultural heritage of this country. Adding all bamboo plants to the growing list of declared weeds will not address the ignorance and misunderstanding in our attitudes towards bamboo. Some strategic approaches to increasing awareness of these plants are:

- (i) identification and mapping of bamboo species in Australia;
- (ii) species identification charts for community, nursery and agricultural industries and quarantine inspectors;
- (iii) field trials for potentially useful species including rhizome controls; and
- (iv) standardised weed hazard rating for potentially rampant species, based on field trials and regional climatic criteria.

VARIATION OF SEED DORMANCY IN WEED WILD RICE (*ORYZA*) SPECIES

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Wild rices (*Oryza* spp.) are a problem in the production of rice in the direct-seeding areas in tropical countries. Seeds of wild rice shed readily at maturity and show a deep dormancy, enabling survival for extended periods under unfavourable conditions. The nature and variations of dormancy in 10 strains of wild rice and 3 strains of weedy wild rice collected from various countries were determined.

Wild species of rice were grown in the greenhouse at day and night temperatures of 31°C and 26°C. All the seeds of wild rices were found to be dormant and as heat treatment was prolonged or when unhulled, germination percentage was raised. Seeds of *O. rufipogon* from India, Myanmar, and Malaysia and *O. breviligulata* and *O. brachyantha* from West Africa showed extremely deep dormancy, whereas weedy wild rices which were considered to have absorbed genes from cultivated rice through natural hybridization showed higher germination rate. Dry condition was found to be influential in breaking dormancy of wild rice seeds regardless of the temperature range, whereas moist condition was unfavourable. Seed dormancy among the same species of wild rices varied greatly with the country of their origin.