

## QUARANTINE.

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The Commonwealth Minister for Primary Industries and Energy established earlier this year an independent Australian Quarantine Review Committee, chaired by Professor Malcolm Nairn, Vice-Chancellor of Northern Territory University, to review Australia's animal and plant quarantine policies and programs. The last review, the Lindsay Report (1988), recommended a policy of 'acceptable risk' based on bio-economic analysis. The Nairn Committee is to make recommendations on the future framework for quarantine policy, management and implementation. A brief submission was prepared and submitted for the Australasian Mycological Society. A request was also made for the opportunity to discuss further these matters at public hearings to be held later in the year. Comment from members of AMS on matters to be raised at such a hearing would be appreciated.

The Australian Academy of Science, Canberra, has published *Submission to the Australian Quarantine Review Committee* a valuable 58 page document detailing recent breaches of quarantine and highlighting, among other matters, the need for more consideration of the long term environmental consequences of introduction of exotic organisms.

### SUBMISSION TO THE COMMITTEE OF INQUIRY TO REVIEW AUSTRALIA'S QUARANTINE POLICIES AND PROGRAMS

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#### **Recommendation (a). Appropriate revisions in Australia's animal and plant quarantine policy framework.**

The present policy is in practice concerned only with problems of commercial agriculture and to a lesser extent forestry and fisheries. The membership of the Review Committee illustrates this point. Australia's agricultural (including livestock) industries are almost exclusively based on exotic plants or animals, where there is usually a large literature based on overseas research. The present quarantine policy fails to recognize the unique features of the indigenous flora and fauna and to have a mechanism to evaluate 'acceptable risk' for conservation values. It would seem that saprophytic micro-organisms are viewed as not being a quarantine risk despite the fact that they may occupy habits in Australia and in so doing out compete and so put at risk components of the indigenous native microflora. The present user pays policy in practice means that exotic pathogens or pests establishing in native communities will not be subject to eradication measures and will not be managed.

#### **Recommendation (b). Revisions to the quarantine risk assessment process.**

A very conservative approach is needed when assessing 'acceptable risk' for native fungal communities because i). the difficulties of early detection and of control; native plant communities are subject to low levels of monitoring, there are few people with the expertise to recognise problems other than the catastrophic, and many of the fungi are microscopic and thus difficult to detect. ii). the potential impact of introduction of exotic fungi e.g. *Phytophthora cinnamomi*. iii). the absence of data on which to develop a meaningful risk assessment using present protocols which emphasise the economic rather than the biological.

Once introduced and established exotic fungi are here to stay. The present risk analysis process is a short term economic analysis based on the assumption that agricultural enterprises will adjust. Long term impacts on indigenous organisms and communities are not assessed or quantified. For example, consider the introduction of fresh edible wild mushrooms from overseas. The possibility that the fungi could establish in Australia is ignored. AQIS has belatedly recognised that diseased needle, leaf, or twig fragments could be attached to the fruiting bodies and could be a means of introduction for pathogens of trees, etc. However, the practicality of physically examining each fruiting body is ignored. Furthermore, fruiting bodies are typically colonised by mycophagous insects, nematodes and mites. These are usually cryptic and microscopic. We have seen with the cut flower import trade that existing fumigation practices do not prevent introduction of insect pests.

'Green' timber is imported in large volumes; if insects are detected the timber is fumigated. However, stain and decay fungi are ignored. Recent concerns about pitch canker disease of radiata pine in California becoming established in Australia have brought the risks associated with this practice to notice again. Pitch canker also highlights another difficulty in that AQIS do not generally recognise fungi or other micro-organisms at subspecific rank. Thus the pitch canker fungus *Fusarium subglutinans* occurs in Australia but not the pathovar or form (forma *pini*) that causes pitch canker disease.

**Recommendation (c). Capacity of existing quarantine programs to deliver the requisite level of quarantine protection determined by the Government.**

AQIS no longer has any technical expertise in systematic mycology or the pathology of native communities. It relies on expertise in State Government Departments, CSIRO, and Universities or on literature searches. With no technical expertise records are accepted on face value ignoring changes resulting from taxonomic research and changed species and generic concepts. In the past large numbers of European species of macrofungi were reported from Australia. Based upon taxonomic revision of herbarium collections it is now known that most of those determinations were incorrect. Yet AQIS still grants import approvals based on outdated and incorrect records.

Whether or not technical advice from outside sources is accepted seems to be determined by political and trade considerations rather than the technical or biological.

**Recommendation (d). Adequacy of the existing consultative processes.**

AQIS do not publish their bio-economic pest risk analyses thus there is no opportunity for technical or community input, no way of knowing which organisms are considered of high importance by AQIS, no way of pointing out deficiencies in the risk analysis process. After seeking technical advice there is rarely any report of the outcome or if there is a final recommendation no detail of the reasons for the determination. Given the importance of the decisions being made we think it important that for each 'generic' approval the process be documented and published. This would make the process transparent.

**Recommendation (e). Appropriate balance between cost-recovered and community service funded program elements.**

AQIS aims for full cost recovery, and insists a prime client is always identified. A social value or community service value is not considered. Expenditure on eradication attempts is often pitifully inadequate (e.g. chrysanthemum white rust). Conservation values are largely ignored especially when there is no commercial value.

Too often quarantine decisions seem to be made on the basis of political expediency or on trade imperatives. The role of quarantine and of AQIS in maintaining and conserving the indigenous biota of Australia needs clarification.

## FUNGI WITH A PLEOMORPHIC LIFE CYCLE DISCUSSION GROUP

Eric Swann is interested in setting up an email group for the purpose of discussing Article 59 of the IUCN: Names of Fungi with a Pleomorphic Life Cycle. Discussion is intended to focus on the meaning of terms used in Article 59, the philosophical reasons for continued use of/or deletion of this Article, how the Article currently affects fungal systematics, and how fungal systematics would be influenced in the event of the deletion, or modification of Article 59. I am particularly interested in incorporating people with a diversity of experience and expertise into the discussion.

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