

Dear Members of the Quarantine and Biosecurity Review Panel,

Purpose

I find it imperative to make a submission to the Review of Australia's Quarantine and Biosecurity Arrangements in the hope that significant changes will be made to the ill-conceived and unworkable practices currently associated with the latest 2007 version of the ICON database. I unequivocally support enforcements, even draconian measures, required to protect our nation from potentially dangerous insect and weed intrusions. However, we must not allow bewildering bureaucratic processes to overwhelm these intentions. AQIS must reconsider the requirements of plant collectors, rather than persisting with this system. Despite the claims of AQIS, I believe this new system was introduced with limited consultation.

My experience

Firstly, let me introduce myself. I am a retired university academic, but more relevantly the President of the Bromeliad Society of South Australia, a position I have held for more than twenty years. During that time, I have amassed a substantial collection of bromeliads, to which I devote a lot of my time. I have also written several articles and have presented numerous talks on bromeliads both inside Australia and in overseas countries, including four invited seminars at World Bromeliad Conferences.

In 1993, I was part of a four man collecting expedition that roved and camped for six weeks in the high Andes Mountains of Bolivia. In a remote canyon, at 3200m altitude, I discovered a previously unknown *Tillandsia*, a small member of the bromeliad family. This species was subsequently described in an international journal in 1997 and named *Tillandsia colganii*, the first time such an honour had been bestowed upon an Australian.

Bromeliaceae

The members of your panel should be aware of the booming popularity of bromeliads within Australia. This is because of the spectacular beauty and intriguing characteristics of these fascinating plants. But this is happening world wide. More nurseries and societies are emerging to satisfy the desires of individual collectors. Increasingly, many cultivated bromeliads are adorning office buildings, airports, hotels and shopping centres around the globe. I must admit I was surprised to see so many bromeliads in China last year, even in distant Yunnan province. The native habitat of bromeliads ranges from Florida in the USA, through Central America and the Caribbean, down to subtropical South America. There are thousands of species divided into more than fifty genera. These species are precious to the serious horticulturists and conservationists. Many of their natural habitats are being destroyed daily, and it is only botanic gardens, nurseries and horticulture that can save many species. But, to the hordes of amateur hobbyists, it is the countless number of man-made hybrids that provides the most excitement, with more and more spectacular cultivars being created and entering the world market.

Genera, rather than species and cultivars, wherever appropriate

To give you some *a priori* appreciation of the unmanageability of the ICON database in its current form, and to provide foresight into my recommendations, let me refer to merely one of the genera from the bromeliad family, namely *Neoregelia*.

Please go to <http://www.fcbs.org/pictures.htm> and click on genus #39, Neoregelia. At this time, there are pictures and information concerning 90 species and 3134 different cultivars. This list is continually growing. If you examine many of these plants, you will see that they all have the same basic physical properties but vary mainly in the patterns on the leaves. The more spectacular plants are, of course, the most desirable and inevitably the most expensive. But, of relevance to your Review, there should be absolutely no difference whatsoever to the quarantine or biosecurity conditions for importation into Australia of any of these thousands of plants. It is ludicrous for the bureaucrats to insist that a separate painstaking 7-page AQIS Plant Introduction Form be filled out for all or any of these that people might wish to import. There is no doubt many of these are already in Australia. ***As long as it is accepted that there are no species or cultivars within a genus capable of any risk, all such plants must be covered at the genus level***, in this case Neoregelia. Otherwise the workload would be horrendous for the applicants, not to mention the inevitable prolonged delays in receiving approval, with probable cursory examination, due to the impracticability within AQIS itself. And, most significantly, there is no hint whatsoever that any plants in any of the bromeliad genera are a serious risk.

Allow me to elaborate on importation.

Importing and treatment: methyl bromide

During the last twenty years, I have imported numerous shipments of Bromeliads into Australia. In fact, taking into account the application fees, initial inspection fees, treatment fees, transportation fees, quarantine fees, final inspection fees, etc, there is no doubt that I have contributed significantly to the coffers of AQIS. Many of my acquaintances around the nation have done likewise. A second issue worth briefly mentioning at this stage is the treatment of all of my plants using methyl bromide. This has resulted in a depressing percentage of plants being killed immediately upon arrival. I recall complaining to senior bureaucrats in AQIS in the late 1980s, and was assured that scientific investigations would soon find some other method of treatment that would be equally effective against insect pests (which most likely were not there anyway), but would be less fatal to the plants themselves. However, despite Kyoto declaring methyl bromide as the most harmful of all greenhouse gases, it is still the preferred treatment being used. You can imagine my anger when I saw an advertisement in Adelaide's daily newspaper, inserted by the state government in the 1990s, calling for tenders for companies to exterminate weeds alongside the main highway from Adelaide to Melbourne using methyl bromide. And this is the vicious gas still used on our bromeliads!

ICON database: ordering a list of plants from overseas

Let me return to the main issue of the ICON database. My earliest importations involved price lists from registered bromeliad nurseries overseas, mainly in the USA. My application form listed the species to be imported, and the number of plants of each. Because there were classifications on the database covering a whole genus, there were no complications. The imported shipments were addressed to AQIS in Adelaide.

As expected, most of the plants imported were not already in Australia, or else one would attempt to acquire them locally. For example, my list might include:

- 3 x *Tillandsia species1*
- 2 x *Tillandsia species2*

- 1 x *Tillandsia species3*
- 3 x *Tillandsia species4*
- etc

Of course, none of these would be on CITES. Because there was a general category on the ICON database listing *Tillandsia spp*, and because it was accepted that no tillandsia could possibly pose any threat to Australia's biosecurity (they are not weeds), the whole process was efficient, and would still be efficient today.

Importing: carrying plants back personally

The other two categories of importation involved plants being carried back by me personally and handed to AQIS officers upon disembarkation from the aircraft. I had notified AQIS on the original application forms of the precise flights, and had also contacted the AQIS office in the relevant city to ensure they had someone with sufficient seniority present at the Quarantine inspection at the airport. After checking that the import permit papers were correct, they then assumed control of the sealed container.

ICON database: collecting in the wild

A few such importations involved my collecting in the wild. For example, there was the Bolivian trip of 1993 mentioned above. The most recent was in 2004 whereby I sponsored and participated in an expedition, authorized by the Bolivian government, led by their local botanists, with the outcome of adding to the Living Plant Collection of Bolivia. The other aims included some terrestrial bromeliads to add to the famous collection of such plants at the Botanic Gardens of Adelaide, as well as some for my own collection. We were able to explore remote regions not previously investigated by bromeliad aficionados. Of course, I had no idea in advance of the precise identity of the plants to be carried back. Some might be new undescribed species, while some might not be able to be identified exactly until after flowering. But each corresponding genus would be obvious!

For each trip, my application form listed about 4 *wholly accepted* bromeliad genera from the ICON database, with a maximum number of different species in each (or habitat locations, if the species was unidentifiable at that time), and a maximum number of plants of each type. Consequently, I was restricted by these conditions which ensured that only plants from the specified genera would comprise the shipment. Inside the container was a detailed list of the numbers of each species, and the GPS coordinates of the habitats. This system worked perfectly. However, if whole genus classifications are no longer available on the ICON database, this whole concept will be virtually impossible. What would one list on the application form?

ICON database: purchasing/receiving plants while overseas

The final type of importation is by far the most common for myself, and for many other Australian bromeliad collectors and nurseries. I have attended a number of World Bromeliad Conferences and I have visited a number of bromeliad nurseries (mainly in the USA and Europe). Upon seeing what was available and what would enhance my collection, I have purchased many hundreds of plants (probably more than one thousand) during the last twenty years. In addition, I have been fortunate to be given on location many bromeliads from leading Botanic Gardens in the USA and Europe.

Before leaving on such a trip, there was never a problem filling out the application form to import plants. Again, I merely had to list certain genera that involved no risks

or other importation issues, and give a maximum number of plants of any **unspecified** species or cultivars from within each genus. I had little idea beforehand what I might bring back, but the genus categories on the ICON database enabled everything to operate perfectly.

My Recommendations

I strongly urge the Panel to include the following in its report:

- AQIS must declare the current situation regarding the development of a replacement for methyl bromide. What has all of the research over the last 20 years achieved?
- Where it is accepted that all species and cultivars within a particular genus pose no risk to the biosecurity of Australia, there must be a mechanism available to register that genus without having to submit every species and cultivar individually. If AQIS wishes **thereafter** to refer to a list of some sort, then lists such as that for Neoregelia above can be used.
- The ICON database for importing plants must contain a general category specifying each accepted and registered genus within the Bromeliaceae. For example, one could apply to import any plants within a genus by quoting Aechmea spp, Tillandsia spp, Neoregelia spp, Vriesea spp, Dyckia spp, Guzmania spp, Deuterocohnia spp, etc. If necessary, applicants may be required to specify maximum numbers, as I have done in the past. It should be compulsory that a detailed list of the precise species and cultivars must accompany the eventual shipment when it finally enters Australia.
- The ICON database should be flexible enough to permit importation of new species from within an accepted and registered genus. This is most important for the preservation of endangered species saved from habitat destruction. For example, on the list of actual plants being imported, an item such as *Tillandsia sp nova* should be permitted without undue paperwork at the time of entry, assuming Tillandsia as a whole is registered as having no risk.

Yours sincerely, Len Colgan.