CONSIDERATION OF PROPOSALS FOR AMENDMENT OF APPENDICES I AND II

Proposals resulting from reviews by the Plants Committees

A. PROPOSAL

Deletion of all species of the genus *Byblis* from Appendix II.

B. PROPONENT

Australia

C. SUPPORTING STATEMENT

A small genus of carnivorous plants in the monotypic family Byblidaceae. At the time of entry into the CITES Appendices, the genus contained two described species. One was the wide-ranging *Byblis liniflora*, distributed across northern Australia, the south-eastern corner of Irian Jaya, Indonesia and reported to occur in Papua New Guinea. The second species, *B. gigantea*, was highly restricted with a few small populations near Perth, Western Australia. This species was the basis for the CITES listing, with *B. liniflora* listed as a look-a-like taxon. Trade in the genus arises from the carnivorous plant trade. None of the species are of significant horticultural value outside this specialist interest group.

Following a recent revision of the genus for northern Australia (Lowrie & Conran, 1998), 5 taxa are now recognised for the region. Within Australia the genus is distributed across the national jurisdictions of Western Australia, Northern Territory and Queensland.

The genus *Byblis* has been identified by the CITES Plants Committee under the Ten Year Review as a candidate for deletion from Appendix II as there has been very limited trade in wild taken specimens since the taxa was listed and at least four (if not all) species of the genus are annual and easily propagated from seed. *Byblis* produces copious seed that can be easily germinated after 24-hour treatment with Giberellic acid at 10 ml/l.

The proposed deletion received full endorsement of the 9th meeting of the CITES Plants Committee in Darwin, June 1999.

1. Taxonomy

1.1.	**Class**	Magnoliatae
1.2.	**Order**	Rosales
1.3.	**Family**	Byblidaceae
1.4.	**Genus/species**	*Byblis aquatica* (Lowrie & Conran 1998), *Byblis filifolia* (Planch.1848), *Byblis gigantea* (Lindley 1839), *Byblis liniflora* (Salisb.1808), *Byblis rorida* (Lowrie & Conran 1998)
1.5.	**Scientific synonyms**	For *B. filifolia*; B.liniflora subsp occidentalis
1.6.	**Common name**	Rainbow plant, Southern Byblis

2. Biological data

2.1. Distribution

Byblis aquatica

Restricted to the Northern Territory and all known locations are from within a 40 km radius of Darwin (lat.12°23'S, long. 130°50'E). Principally from the locations of Palmerston, Howard Springs and Noonamah. This species has only recently been recognised and further locations would be expected as there is a larger area of suitable habitat.

Byblis filifolia
Widely distributed through the Kimberley region of Western Australia and extending into the Northern Territory. The distribution recorded by Lowrie & Conran (1998) shows some disjunctions. The taxonomic status of the species has only recently been clarified and further locations would be expected, as there is a larger area of suitable habitat.

Byblis gigantea
Occurs in the south west of Western Australia from latitude 29°15'S to 33°15'S (over approximately 450 km and extending approximately 50 km inland). There is a reported disjunction in the distribution of the species with a very restricted southern disjunct known from a few sites within the state capital city of Perth. Authors of a recent paper on the genus (Lowrie & Conran, 1998) are preparing to recognise 2 subspecies within *B. gigantea* supported by both morphological and distributional differences.

Byblis liniflora
Widespread throughout the northern regions of Western Australia, Northern Territory and Queensland. Also recorded from Indonesia in the province of Irian Jaya by Van Steenis (1971). The Indonesian occurrence is based on a single collection near Merauke with the specimen lodged at Leiden. No new additional records have been located in the Indonesian Herbarium at Bogor during a search in early 1998. Similarly, no records were located at the Papua New Guinea National Herbarium (O. Gideon, PNG Forest Research Institute, pers comm). The habitat and vegetation around Merauke is also found in Papua New Guinea and the species is likely to be confirmed in the Western Province with further survey work. Based on the published description by van Steenis, the taxon in Indonesia seems a reasonable match for *B. liniflora*. However, a recent examination of the Leiden specimen has highlighted differences in the significant characters of calyx indumentum, seed size and seed ornamentation. Further taxonomic work is required.

Byblis rorida
Known from scattered locations throughout the Kimberley region of Western Australia.

2.2. Habitat
Byblis species occur in a variety of habitats, but generally in seasonally wet areas and on the margins of shallow freshwater or coastal wetlands, watercourses and seepage areas. Specimens occur on a variety of soil types from sandy to clayey sand, on skeletal soils and may ocassionally be found on stony rises.

2.3 and 2.4. Population and population trends
No species within the genus is listed as threatened on the IUCN Red lists.

No *Byblis* species are included on the Australian *Endangered Species Protection Act 1992*, or on any national listing of threatened, rare or poorly known flora. Western Australian flora that is rare, threatened or otherwise in need of special protection may be 'declared to be rare' and is provided special protection status. Flora that is being considered for declaration as rare flora, or which is being monitored to ensure the species is not threatened, are listed as Priority Flora. No *Byblis* species is listed as either declared rare flora or Priority Flora in Western Australia. No *Byblis* species are in the categories of protected or specially protected in the Northern Territory.

Byblis liniflora is not listed as threatened or rare under Indonesian or Papua New Guinea legislation.

Byblis aquatica
Due to the recent discovery of the species the population and population trends are unknown. The proximity of known locations to the major urban centres of Darwin and Palmerston places many locations under threat of land clearance. The habitat is also a common source of sand quarries for the construction industry. The species has been recorded in one nature reserve.

Byblis filifolia
Due to the recent clarification of the taxonomic status of the species the population and population trends are unknown. The species is recorded from many isolated areas which are not prone to development or disturbance. The species is not considered to be under threat. The species has been recorded in two nature reserves.

Byblis gigantea
No population number and size estimates have been recorded for the species but overall it is regarded as being "common". Two sub-species are proposed: a 'northern' form and 'southern' form. The northern form is recorded from one nature reserve. The southern form, occuring near Perth is under more serious threat. There were until recently four populations but one is now a housing estate, and the others are in the University reserve, Perth airport and a small isolated site in the upper Canning River system. If the taxanomic delineation of sub-species is adopted then the taxon will be reviewed to determine whether the southern form should be placed on national or state conservation lists. There are some indications that *B. gigantea* may be a perennial unlike the other species within the genus.

Byblis liniflora
A common species not considered to be declining. The species has been recorded in a number of nature reserves.

Byblis rorida
Trends unknown but recorded as locally common and due to isolated nature of much of the distribution not considered under threat.

3. Trade data

3.1. National utilisation
Byblis plants are commonly grown by insectivorous plant growers and plants are available commercially in specialist Australian plant nurseries.

Small quantaties of seed are harvested from State lands each year under State permits. A typical years collection was 1997 when 120 grams of *B. gigantea* was collected.

3.2. Legal international trade
Total exports of *Byblis gigantea*, *Byblis* species (suspected of also being gigantea) and *Byblis* hybrids live plants from Australia*. (Source: Environment Australia)

Year	Quantity	Destination
1994	nil	
1995	9	JP,SG
1996	nil	
1997	10	GB, US, unknown
1998	unknown (2 exports)	unknown

*All specimens were artificially propagated.

There is no recorded trade from either Papua New Guinea or Indonesia.

3.3. Illegal trade
There is a diversity of opinion on the extent of illegal trade. It has been argued that the ease of propagation means there is little advantage in wild collection. However, all species are reportedly being sought by collectors internationally and there are unsubstantiated reports of international collectors (particularly from Europe) engaging in illegal wild collecting of both seed and plants/cuttings in Australia. The recent recognition of new taxa will create a demand from enthusiasts.

3.4. Potential trade threats

3.4.1. Live specimens
All records indicate that the limited international trade in this taxa is confined to artificially propagated live whole plants. Most of the propagators and exporters of this species are located on the eastern seaboard of Australia, well away from the natural range of the taxa.

3.4.2. Parts and derivatives

There is no known trade in parts or derivatives. The export of seeds of the taxa is not regulated under Australian law at present.

4. Protection status

4.1. National

Byblis is subject to export control under the *Wildlife Protection (Regulation of Exports and Imports) Act 1982*. Export permits are required for all specimens, whether artificially propagated or harvested from the wild. This situation will not change if this proposal is adopted.

Under Western Australian law (*Wildlife Conservation Act 1950*) all native flora is protected, and a licence is required to take (harvest or remove any parts) from Crown land. A licence is also required to sell any native plants taken from private land. Trade in native flora is thus regulated and monitored in the State. Licences to take native flora from Crown land specifically prohibit the removal of whole plants, and the harvesting of plants in such a manner that might jeopardise the survival of the plant. Should the southern form of *B. gigantea* be classified as declared rare or priority flora in Western Australia it would be prohibited from harvesting on crown land without specific approval.

4.2. International

Currently listed on CITES Appendix II.

4.3. Additional protection needs

None required, since the taxon is adequately protected in its area of endemism.

Since the international trade in this taxa is based on cultivated material and native populations are secure and adequately protected, the removal of this taxon from listing on CITES Appendix II is recommended.

5. Information on similar species

Not applicable

6. Comments from other counties of origin

Indonesia has advised the Secretariat that they have no objection to the deletion of *Byblis* from Appendix II. Indonesia further comented on the draft proposal confirming support for the delisting and confirming that no trade had been recorded form that country.

Papua New Guine has advised the Secretariat that they support the proposal to delete the taxa from Appendix II.

7. Additional remarks

8. References

Erickson, R. (1968). *Plants of Prey in Australia*. Lamb Paterson, Perth.

Lowrie, A. & Conran, J.G. (1998) A taxonomic revision of the genus Byblis (Byblidaceae) in northern Australia. Nuytsia 12:59-74.

Van Steenis, C.G.G.J. (1971) Byblidaceae. In Flora Malesiana 7:135-137.