

Other Proposals

A. PROPOSAL

Inclusion of Aristolochia indica in Appendix II.

B. PROPONENT

The Republic of India.

C. SUPPORTING STATEMENT

1. Taxonomy

- | | |
|-------------------|---|
| 11. Class: | Dicotyledonae |
| 12. Order: | Aristolochiales |
| 13. Family: | Aristolochiaceae |
| 14. Species: | <u>Aristolochia indica</u> Lina., sp. Plant. 960, 1753 |
| 15. Common Names: | English: Indian birthword
French:
Spanish:
Hindi: Isharmul, Iswarmul |
| 16. Code Numbers: | Nil |

2. Biological Data

21. Distribution: Throughout India in low hills and plains from Nepal to lower Bengal. In Deccan Peninsula from Konkan southwards to Travancore and in Cormandel coastal plains. Also in Western India; Sri Lanka.
22. Population: Rather sporadic and declining.
23. Habitat: In open sandy gravelly situation.

3. Trade Data

31. National Utilization: The plants are bitter. The powdered roots are used in leucoderma. The leaf juice is considered specific antidotes for poison (cobra). Roots of A. indica constitute an important drug much esteemed as gastric stimulant and bitter tonic. Extracts of A. indica containing aristolochic acid reportedly possesses anti-cancer property.
32. Legal International Trade: Extent unknown. Export from India is not permitted.
33. Illegal Trade: Extent unknown, but suspected to exist.

34. Potential Trade Threats:

341. Live Specimens: Entire live plants.

342. Parts and Derivatives: Roots and leaves.

4. Protection Status

41. National: All species of Aristolochia are included in list A of Schedule I of the Export (Trade) Control Order, 1988 and export of plants and derivatives from India is banned. Collections from Reserved Forests is restricted under the Indian Forest Act.

42. International: Nil.

43. Additional Protection Needs: The declining population of this species requires protection against unregulated international trade. Hence, it is proposed to include it in Appendix II of CITES.

5. Information on Similar Species

There are about 15 species of Aristolochia in India which are easily recognized by the bat-shaped flowers. Export of all species of Aristolochia from India is banned.

6. Comments from Countries of Origin

Nil.

7. Additional Remarks

Nil.

8. References

Anon, 1948; Wealth of India, Raw materials 1:118. CSIR, New Delhi.

Santapau, H. and A.N. Henry, 1973. A Dictionary of Flowering Plants of India, p.16, CSIR, New Delhi.

AMENDMENTS TO APPENDICES I AND II OF THE CONVENTION

Other Proposals

A. PROPOSAL

Inclusion of Aristolochia indica in Appendix II.

B. PROPONENT

The Republic of India.

C. SUPPORTING STATEMENT

1. Taxonomy

11. Class: Dicotyledonae
12. Order: Aristolochiales
13. Family: Aristolochiaceae
14. Species: Aristolochia indica Lina., sp. Plant. 960, 1753
15. Common Names: English: Indian birthword
French:
Spanish:
Hindi: Isharmul, Iswarmul
16. Code Numbers: Nil

2. Biological Data

21. Distribution: Throughout India in low hills and plains from Nepal to lower Bengal. In Deccan Peninsula from Konkan southwards to Travancore and in Cormandel coastal plains. Also in Western India; Sri Lanka.
22. Population: Rather sporadic and declining.
23. Habitat: In open sandy gravelly situation.

3. Trade Data

31. National Utilization: The plants are bitter. The powdered roots are used in leucoderma. The leaf juice is considered specific antidotes for poison (cobra). Roots of A. indica constitute an important drug much esteemed as gastric stimulant and bitter tonic. Extracts of A. indica containing aristolochic acid reportedly possesses anti-cancer property.
32. Legal International Trade: Extent unknown. Export from India is not permitted.
33. Illegal Trade: Extent unknown, but suspected to exist.

34. Potential Trade Threats:

341. Live Specimens: Entire live plants.

342. Parts and Derivatives: Roots and leaves.

4. Protection Status

41. National: All species of Aristolochia are included in list A of Schedule I of the Export (Trade) Control Order, 1988 and export of plants and derivatives from India is banned. Collections from Reserved Forests is restricted under the Indian Forest Act.

42. International: Nil.

43. Additional Protection Needs: The declining population of this species requires protection against unregulated international trade. Hence, it is proposed to include it in Appendix II of CITES.

5. Information on Similar Species

There are about 15 species of Aristolochia in India which are easily recognized by the bat-shaped flowers. Export of all species of Aristolochia from India is banned.

6. Comments from Countries of Origin

Nil.

7. Additional Remarks

Nil.

8. References

Anon, 1948; Wealth of India, Raw materials 1:118. CSIR, New Delhi.

Santapau, H. and A.N. Henry, 1973. A Dictionary of Flowering Plants of India, p.16, CSIR, New Delhi.

AMENDMENTS TO APPENDICES I AND II OF THE CONVENTION

Other Proposals

A. Delist seeds of CYCADACEAE spp. and ZAMIACEAE spp. from Appendix II.

B. PROPONENT

The United States of America.

C. SUPPORTING STATEMENT

1. Taxonomy

- 11. Class: Cycadopsida
- 12. Order: Cycadales
- 13. Family: Zamiaceae
- 14. Genus and Species: All in Appendix II
 - 141. Part: Seeds only
- 15. Common Names: English: cycads
French: cycades
Spanish:
- 16. Code Numbers:

2. Biological Data

The following four points are interrelated:

- 21. Wild Plants vs. Wild Seeds: The only group in Appendix II to have their seeds regulated at present is the cycads. This has a deleterious effect on wild populations: many collectors instead of applying to collect only seeds, which requires the same effort to obtain a (similarly restrictive) permit as for whole plants, simply apply to collect the whole mature female plant(s). If a permit to export the whole plant(s) (rather than just seeds) is considered not detrimental and is issued, this collection effectively and permanently removes breeding individual(s) from the wild population. Furthermore, individual cycad plants are long lived [the life span is so great that it is unknown, but certainly exceeds 50 years in all cycad species; individuals of some species have been estimated as at least 500 years old (Giddy, 1974)]. The result of removing a mature seed-bearing plant is the effective loss of many years of potential seed production. In contrast, the removal of only seeds or a seed cone eliminates only part of or up to the crop of that year. Removing the plant may in fact have been detrimental to the survival of the species; removing the seeds is likely to have been not detrimental.
- 22. Wild Plants vs. Artificially Propagated Seeds: Many amateurs and commercial dealers are now trying to raise cycads from seeds produced in cultivation, i.e. artificially propagated. Some cycad

societies (e.g. the American Cycad Society and the Cycad Society of South Africa) are taking the position, and encouraging their memberships, to raise plants from seed rather than obtaining or collecting wild plants. Because cycads are dioecious (male and female individual plants), some people go to great effort to store pollen, establish pollen banks, and exchange pollen with others who have receptive female plants. However, if they then produce seed, they are beset with regulatory problems (e.g. delays) when trying to exchange the seed with others in other countries. Consequently, these people often no longer bother to try to produce seed by artificial pollination. They would only end up with extra seed, and germinate more plants than they could grow or have space for. So again the international market for wild-collected plants is not diminished, because artificially propagated seeds are not easily available.

23. Wild Plants vs. Non Compliance in Regulating Wild Seeds: Cycads as a rule produce copious quantities of seeds: from 1,000 per cone in species with large cones (e.g. Macrozamia moorei F. Muell.) or with many megasporophylls (e.g. Cycas spp.), to 100 per cone in species with small cones (e.g. Zamia pygmaea Sims). The successful germination of the seeds of one cone could produce enough plants to supply the world demand for some of the most highly sought after cycad species. Providing the cultivated plants would effectively reduce the pressure on taking wild plants.

However, the fact that cycads produce such copious quantities of seeds has led one (confirmed) to several countries to conclude that the seeds do not need protective regulation. Therefore, they do not issue export permits for cycad seeds or regulate the exports at all. Consequently, when people order seeds from nurseries or have seeds sent by friends from these countries -- the seeds are confiscated at ports of entry because they lack documentation. (Furthermore, for the most part, confiscated seeds may be wasted if they go into a general rescue center: either the seeds do not germinate or the cycads do not live, or the cycads live but may not be put to their best use because there is no one knowledgeable about those species.) The result is deleterious to some to all wild cycads in these countries (the confirmed country has four cycad genera, three endemic with about 17 species): seeds are no longer collected or exchanged, because permits will not be issued, and unpermitted seeds may be confiscated, forfeited and misused - instead, wild plants are obtained and shipped because permits for wild plants are issued! Thus, the efforts to regulate seeds to maintain wild populations once again are counterproductive.

24. Propagation Preventing Extinction in the Wild: The efforts of individuals and botanical gardens to produce seeds of cycads have resulted in the prevention of extinction in the wild of some taxa. For example, the distribution of seed of Microcycas (Appendix I) from cultivated plants has probably done a good deal to save this monotypic genus. It effectively eliminated the extremely high prices for stolen and other illegally obtained plants, to the point where it is no longer economically feasible to obtain Microcycas by illicit means.