

CONSIDERATION OF PROPOSALS FOR AMENDMENT OF APPENDICES I AND II

Proposals resulting from reviews by the Plants CommitteesA. Proposal

Delete *Frerea indica* from Appendix II.

B. Proponent

Swiss Confederation.

C. Supporting Statement1. Taxonomy

- 1.1 Class: Dicotyledonae
- 1.2 Order: Gentianales
- 1.3 Family: Asclepiadaceae
- 1.4 Genus: Frerea: *Frerea indica* L.
- 1.5 Scientific synonyms:
- 1.6 Common names: English:
French:
Spanish:

1.7 Code numbers:

2. Biological Parameters

2.1 Distribution

The genus *Frerea* is a monotypic genus, with only one species *Frerea indica*. The species resembles *Caralluma fimbriata* (Tetali *et al.*, 1997) and its natural distribution is limited to six localities in the Maharashtra State of the Republic of India.

India, endemic to Maharashtra State.

2.2 Habitat availability

It is not found elsewhere. In the wild, *F. indica* grows on rock crevices of hill cliffs. It grows between ca. 750 to 1350 m altitude on hill slopes facing south-east or north-west directions. The plant supports varying rainfall quantities.

2.3 Population status

In the wild the species is represented by few individuals. But opinions differ about the rarity of the species; Tetali *et al.* (1997), mention about 250 populations (it might be that in the referred article, 'specimens' is meant instead of 'populations') in total for the species, inhabiting ca. 4400 m². Due to small population size, the nature of the habitat and palaeo-endemism, the species has been listed as endangered or threatened. Some authors assumed that poor follicle (fruit) formation in the wild is due to extinction of pollinators.

2.4 Population trends

Population appears to be very small, but shows no tendency to decline. There is mention that the species might be commoner than generally thought.

2.5 Geographic trends

Not applicable.

2.6 Role of the species in its ecosystem

Not applicable.

2.7 Threats

Under natural conditions the various types of threat are the following: fire, grazing and natural calamities. It is a pretty succulent with star shaped flowers, and could make a good indoor plant if the necessary health care is taken. No evidence is available that the collection from the wild for international trade takes place.

3. Utilization and Trade

3.1 National utilization

Not applicable.

3.2 Legal international trade

1982: 1 artificially propagated specimen from United States of America to Nicaragua.

1984: same as 1982

1986: 1 artificially propagated specimen from Great Britain to United States of America.

1987: 1 artificially propagated specimen from United States of America to Italy.

1988: 4 artificially propagated specimens from United States of America to Italy.

1989: 2 artificially propagated specimens for scientific purposes from United States of America to Great Britain.

1990: 1000 artificially propagated specimens to Austria, of which 500 from Denmark, 500 from the Netherlands.

1991: 1 artificially propagated from a botanic garden, from Spain to Austria.

1992: 5 artificially propagated specimens, all from United States of America to Switzerland, Great Britain and Italy respectively.

Trade in artificially propagated specimens only; all from Europe to and from United States of America. Endangered, but not by trade. Trade threat not plausible, as plant is easy to propagate.

3.3 Illegal trade

Not known to exist.

3.4 Actual or potential trade impacts

None.

3.5 Captive breeding or artificial propagation for commercial purposes (outside country of origin)

Frerea indica can be propagated through seeds and stem cuttings (which is the case for most Asclepiadaceae). Seed germination under nursery conditions is excellent. Rooted branches can be easily grown into separate plants.

Vegetative and generative artificial propagation is easy.

It is commonly infested by various insects, especially under nursery conditions.

4. Conservation and Management

4.1 Legal status

4.1.1 National

No information available.

4.1.2 International

Trade in this species is limited in number and only occurs as artificially propagated specimens.

The republic of India proposed this species for inclusion in Appendix II in 1979, at the second meeting of the Conference of Parties of CITES in San Jose, Costa Rica. In the proposal the proponent mentioned the taxonomy of the species; under 'Biological data' the indication of the distribution was 'Concan', and no information was given on its population status or habitat. Under 'Trade data' no mention of legal or illegal trade is given; as 'national utilization' 'rare and endemic plants of botanical interest' is given. The proposal mentions that the plant is included in the list of endangered plants of India.

4.2 Species management

4.2.1 Population monitoring

Not applicable.

4.2.2 Habitat conservation

Not applicable.

4.2.3 Management measures

Not applicable.

4.3 Control measures

4.3.1 International trade

Currently included in CITES Appendix I.

4.3.2 Domestic measures

Not applicable.

5. Information on Similar Species

Resembles *Caralluma fimbriata*.

6. Other Comments

None.

7. Additional Remarks

- *Frerea indica* is not in trade from the wild.

- The species is Endangered.
- Threat for *Frerea indica* is due to fire, grazing, natural calamities and insects.
- The specimens of *Frerea indica* found in trade, are traded as artificially propagated specimens. *Frerea indica* can be propagated vegetatively easily by cuttings, and is produced easily from seeds.

8. References

- P. Tetali, Sujata Tetali, D.K. Kulkarni, M.S. Kumbhojkar. 1997. Studies on the status and conservation of *Frerea indica* Dalz., in Journ. Bot. Bombay Nat. Hist. Soc. 94/1: 115-121.