AMENDMENTS TO APPENDICES I AND II OF THE CONVENTION

Other Proposals

A. PROPOSAL

Inclusion of Aconitum deinorrhizum in Appendix II.

B. PROPONENT

India.

C. SUPPORTING STATEMENT

- 1. Taxonomy
 - 11. <u>Class</u>: Dicotyledoneae
 - 12. Order: Ranales
 - 13. Family: Ranunculaceae
 - 14. <u>Scientific Name</u>: Aconitum deinorrhizum Stapf in Ann. R. Bot. Gard. Cal. 10: 158, t. 103. 1905
 - 15. Scientific Synonyms: None
 - 16. <u>Common Names</u>: English: "Indian Aconite" French: Spanish: Hindi: Mohra Kashmir & Punjab: Dudhia bish, Safed bikh.
 - 16. Code Numbers:

2. Biological Data

- 21. Population Status: Listed in the Red Data Book of Indian Plants vol.1 as "vulnerable".
- 22. <u>Population Trend</u>: Endemic to Himalayas and becoming endangered.
- 23. <u>Distribution</u>: Jammu & Kashmir, Himachal Pradesh. Nepal, Bhutan.
- 24. <u>Habitat Availability</u>: Alpine grassy slopes at altitudes of 3000-4500 m.
- 25. <u>Geographic Trend</u>: Alpine meadows of Himalayas from Kashmir and extending eastward to Bhutan.
- 26. Threats: Becoming endangered due to excessive collection of roots for medicinal uses.

- 3. Utilization and Trade:
 - 31. <u>National Utilization</u>: It is a principal constituent of 'A. Ferox' and is a chief source of Indian Aconite now exported. An important drug in local trade.
 - 32. Legal International Trade:
 - 33. <u>Illegal Trade</u>: It is believed that the raw materials as well as the extract is exported but no figures are available.
 - 34. <u>Actual Potential Trade Impact</u>: High trade potentiality for being chief source of "Indian Aconite"; plant is endemic to Himalayas. Over-exploitation for the roots is depleting populations.
 - 35. <u>Captive Breeding or Artificial Propagation</u> (outside country of origin): Not known.
- 4. Conservation and Management:
 - 41. Legal Status:
 - 411. <u>National</u>: Export of the plant and its derivatives is prohibited under Export (Control) Order.
 - 412. International:
 - 42. Species Management:
 - 421. Population Monitoring: Being undertaken.
 - 422. <u>Habitat Conservation</u>: No specific conservation strategy is implemented but certain areas of its occurrence included under different declared protected areas.
 - 423. <u>Management Measures</u>: None specific to the species undertaken so far.
 - 43. Control Measures:
 - 431. International Trade:
 - 432. <u>Domestic Measure</u>: Due to over-exploitation the species is under severe threat. Measures are being proposed to protect the plant in its natural habitat. Collection of the species from the wild is being banned and attempts are being made for its *ex situ* propagation.
- 5. Information on Similar Species
 - 51. <u>Similarity in Appearance</u>: Aconitum ferox, A. atrox, A. spicatum, A. laciniatum and A. balfourii are similar to A. deinorrhizum and all are the source of "Indian Aconite". 27 species of Aconitum L. are reported from India all species are not yet assessed chemically but probably all have medicinal potentiality. Thus the whole genus Aconitum L. is being considered for inclusion in the Appendix II of CITES.
 - 52. <u>Nature of Specimen in Trade</u>: Root and alkaloid extract.

6. Comments from Countries of Origin

61. Range States: Himalayan range of Nepal and Bhutan.

7. Additional Remarks

<u>Description</u>: Biennial, erect herb with paired tuberous roots. Stem straight, terete, finely pubescent in the upper part. Leaves 5-7 cm long, dilated at the base, blade reniform or ovate-reniform with a very wide sinus or truncate base, 5-partite almost to the base, lobes deeply lacinate. Flowers blue actually for the colour of sepals, upper most sepal oblique, helmet or boat-shaped with a short beak, *ca.* 2 x 0.6 cm, upper lateral sepal obovate, ca 1.5 x 1 cm, lower lateral sepals elliptic, 10-15 mm long. Petals densely hispidulous; head S-shaped, ca 8 mm long; spur recurved. Follicles 3, greyish pubescent.

8. <u>References</u>

Anonymous 1985. The Wealth of India. CSIR, New Delhi, Vol. I: 57-63 (Rev. ed.).

Chowdhery, H.J. 1987. In *Red Data Book of Indian Plants* Vol. 1: 311. eds: M.P. Nayar & A.R.K. Sastry, BSI.

Rao, M.A. 1993. Ranunculaceae in Flora of India Vol. I: 8-10, BSI. Calcutta.

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