

AMENDMENTS TO APPENDICES I AND II OF THE CONVENTION

Other Proposals

A. PROPOSAL

Inclusion of *Aconitum heterophyllum* in Appendix II.

B. PROPONENT

India.

C. SUPPORTING STATEMENT

1. Taxonomy

11. Class: Dicotyledoneae
12. Order: Ranales
13. Family: Ranunculaceae
14. Scientific Name: *Aconitum heterophyllum* Wall. ex Royle, Illus. Bot. Himal. t. 13. 1833 & 86. 1834
15. Scientific Synonyms: None
16. Common Names: English: Indian Aconite
French:
Spanish:
Hind.: Atis root, Atees
Beng.: Ataicha
Kan.: Atibaje, seetha shringe
Sans.: Ativisha
Tam.: Ati vadayam
Kashmir: Atis Patis

17. Code Numbers:

2. Biological Data

21. Population Status: Threatened.
22. Population Trend: Becoming rare due to exploitation of roots.
23. Distribution: Sub-alpine and alpine zones of the W. Himalayas, Pirpanjal range in Kashmir to Kumaon hills at the altitudes of 2000-4000 m and Chamba of Himachal Pradesh, U.P. Pakistan; Nepal.
24. Habitat Availability: Alpine and sub-alpine Himalayan riverbeds and slopes at altitudes between 2000-4000 m.
25. Geographic Trend: Himalayas; from Pakistan eastwards to Nepal.

26. Threats: Becoming rare due to indiscriminate exploitation of roots for Ayurvedic, Unani and medicinal uses.
3. Utilization and Trade:
31. National Utilization: A product from the dried roots is used in indigenous systems of medicine in the treatment of hysteria, throat diseases, diarrhoea, dyspepsia, hypertension, cough, etc. Also used as febrifuge and bitter tonic.
32. Legal International Trade:
33. Illegal trade: Exact data is not available but it is reported to be in international trade both from India and Nepal.
34. Actual Potential Trade Impact: Being the chief source of commercial 'Patis' with total alkaloid content of ca. 0.7% with so many medicinal importance the species has got a rich potential in trade.
35. Captive Breeding or Artificial Propagation (outside country of origin): Not known.
4. Conservation and Management:
41. Legal Status:
411. National: All *Aconitum* spp. plants and derivatives are prohibited from export under Export (Control) Order.
412. International:
42. Species Management:
421. Population Monitoring: Being undertaken.
422. Habitat Conservation: No specific conservation strategy is implemented so far but some areas of its populations are included under different protected areas.
423. Management Measures: None specific to the species so far.
43. Control Measures:
431. International Trade: Proposed for inclusion in Appendix II of CITES.
432. Domestic Measure: Collection of roots from wild source without proper monitoring and control cause threat to the species. Forest Department, U.P. Government has banned extraction of roots from Barhat range, Uttarkashi area. Legislation is being framed to protect the species in the wild.
5. Information on Similar Species
51. Similarity in Appearance: The root drug is frequently adulterated with the insipid and inert tubers of *Asparagus* sp., but the paired tuber of *Aconitum heterophyllum* is readily distinguishable.

52. Nature of Specimen in Trade: Roots which are tuberous, paired, daughter tuber cylindric or conic, 2-5 cm long, bearing a few root fibres.

6. Comments from Countries of Origin

61. Range States: Pakistan and Nepal. (Nepal-UK Forestry Research Project include this species on list of important medicinal plants traded from Nepal.)

7. Additional Remarks

Description: Biennial herbs with paired tuberous roots. Leaves heteromorphous, basal long-petioled and upper cauline sessile. Flowers greenish blue, sepal greenish blue marked with red or violet, uppermost sepal navicular, shortly beaked. Petals glabrous. Follicles 5, contiguous, green, downy.

8. References

Anonymous 1985. *The Wealth of India*. CSIR, New Delhi, Vol. I: 57-63.

Rau, M.A. 1993. Ranunculaceae in *Flora of India* Vol.I: 15-16, BSI, Calcutta.

Shah, N.C. 1983. Endangered Medicinal and Aromatic Taxa of U.P. Himalaya. *An assessment of Threatened plants of India*, p.p. 40-49. eds; S.K. Jain and R.R. Rao, BSI, Calcutta.

