

AMENDMENTS TO APPENDICES I AND II OF THE CONVENTION

Other Proposals

A. PROPOSAL

Inclusion of *Rheum australe* in Appendix II.

B. PROPONENT

India.

C. SUPPORTING STATEMENT

1. Taxonomy

11. Class: Dicotyledoneae
12. Order: Polygonales
13. Family: Polygonaceae
14. Scientific Name: *Rheum australe* D.Don, Prodr. 75. 1825.
15. Scientific Synonyms: *Rheum emodi* Wall. ex Meissn. in Wall., Pl. As. Rar. 3: 65. 1832.
16. Common Names:
- | | |
|-------------|-----------------------------------|
| English: | Himalayan Rhubarb, Indian Rhubarb |
| French: | |
| Spanish: | |
| Beng.: | Bangala revanchini |
| Guj.: | Gammi-revanchini |
| Kan.: | Nat-reva-chinni revalchini |
| Kashmir: | Chutial |
| Mar.: | Mulka-cha-revalchini |
| H.P.: | Ladu, Chuchi |
| Nepal.: | Padamchal |
| Bhutan: | Jhugha |
| Trade name: | Reward chini, Rhubarb |

16. Code Numbers:

2. Biological Data

21. Population Status: Exact status not known but it is becoming rare in its natural habitat due to extraction of the roots and rootstocks.
22. Population Trend: Rare.
23. Distribution: Western and Central Himalayas from Kashmir to Sikkim at altitudes of 3300-5200m.
Bhutan, Nepal, Tibet.

24. Habitat Availability: Temperate to alpine Himalayas: hills and valleys of Kangra & Kulu, in the rocky meadows valleys and open forests of Garhwal Himalayas, Western and Central Himalayas.
 25. Geographic Trend: Western and Central Himalayas extending eastward to Sikkim and Bhutan.
 26. Threats: Becoming rare due to over-exploitation of roots and rootstocks.
3. Utilization and Trade
31. National Utilization: Roots and rootstocks of this plants are used in Ayurvedic and Unani system of medicine as laxative and tonic.
 32. Legal International Trade:
 33. Illegal Trade: Reported to be a major medicinal plant in global trade; quantitative figures not available.
 34. Actual Potential Trade impact: The roots and rootstocks are medicinally used as a tonic, purgative and in atonic dyspepsia. Also used for cleaning gums and teeth and for quick healing of ulcers.
 35. Captive Breeding or Artificial Propagation (outside country of origin): Not known.
4. Conservation and Management
41. Legal Status:
 411. National: All plants, portions and their derivatives prohibited for export from India.
 412. International: Referred for inclusion in the Appendix II of CITES.
 42. Species Management
 421. Population monitoring: Now being undertaken on a limited scale.
 422. Habitat conservation: Some areas of its wild population are included in different protected areas.
 423. Management Measures: Measures for *in situ* conservation are being undertaken and attempts made to cultivate the species.
 43. Control measures:
 431. International Trade: Exact figure not known. However, considering its rarity due to exploitation of roots and its presence in global trade, inclusion in Appendix II of CITES may appropriately assist in strengthening national export legislation.
 432. Domestic Measures: The Forest Department of the U.P. Government has regulated extraction of roots and collection from all wild sources is being controlled. Attention is being given to its protection in original habitats and attempts made for its propagation and *ex situ* conservation.

5. Information on Similar Species

51. Similarity in Appearance: More or less similar to *Rheum nobile* Hook.f., & Thomson but the roots in this species are longer, spongy and inert, leaves smaller (ca. 30 cm diam.) and flowers greenish yellow in panicles whereas in *R. emodi* the roots are stout, leaves larger (ca 60 cm diam.) and flowers are dark purple or pale red in tall axillary panicles.

52. Nature of Specimen in Trade: Roots and rootstocks.

6. Comments from Countries of Origin

Listed as an "important medicinal plant traded from Nepal" (Edwards).

7. Additional Remarks

Description: Stout herbs with woody root-stock, ca. 1 m high, stem streaked green and brown. Leaves long petioled, large ca 60 cm diam., orbicular or broadly ovate with cordate base. Flowers dark purple or pale red in tall axillary panicles. Fruits ca 1 cm long, winged, purple.

8. References

Anonymous 1952. *The wealth of India, C.S.I.R. New Delhi*, Vol. 9: 3-6.

Edwards, D.M. 1993. Nepal-UK Forestry Research Project list of *Important Medicinal, Aromatic and Spice Plants Traded from Nepal*.

Hook.f. 1886. *Fl. Brit. India* 5: 56-57.

Shah, N.C. 1883. Endangered Medicinal and Aromatic Taxa of U.P. Himalaya in *An assessment of Threatened plants of India* eds. S.K. Jain & R.R. Rao. pp. 40-49.

