

AMENDMENTS TO APPENDICES I AND II OF THE CONVENTION

Other Proposals

A. PROPOSAL

Inclusion of *Nardostachys grandiflora* in Appendix II.

B. PROPONENT

India.

C. SUPPORTING STATEMENT

1. Taxonomy

11. Class: Dicotyledoneae
12. Order: Valerianales
13. Family: Valerianaceae
14. Scientific Name: *Nardostachys grandiflora* DC., Prodr. 4: 624. 1830.
15. Scientific Synonyms: *Nardostachys jatamansi* DC., Prodr. 4: 624. 130 p.p. excl. basionym; Clarke in Hook.f., Fl. Brit. India 3: 211. 1881.
16. Common Names:
- | | |
|--------------|--------------------------|
| English: | |
| French: | |
| Spanish: | |
| Bhutanese: | Jatamansi, Pampe |
| Garhwal: | Masi |
| Guj.: | Jatamansi, Kalichhad |
| Hindi: | Jatamansi |
| Kan. & Mal.: | Jatamanshi |
| Kashmir: | Bhutijatt, Kukilipot |
| Mar.: | Jatamanshi |
| Nep.: | Haswa, Jatamangsi, Naswa |
| Sans.: | Jatamansi |
| Tam.: | Jatamashi |
| Tel.: | Jatamamshi |

17. Code Numbers:

2. Biological Data

21. Population Status: Included as "endangered" in the Red Data Book of Indian Plants, vol.2
22. Population Trend: Endangered.
23. Distribution: Himalayas, Himachal Pradesh to Bhutan and further extended to Tibet and W. China.

24. Habitat Availability: Alpine grassy slopes, from 3000 to 4500 m alt.
 25. Geographic Trend: Alpine meadows of Himalayas from Kashmir and extending eastward to Bhutan.
 26. Threats: Endangered due to over-exploitation of its rhizomes, habitat degradation and other biotic interferences.
3. Utilization and Trade
31. National Utilization: The rhizomes are collected from wild plants for their use in Indian systems of medicine.
 32. Legal International Trade:
 33. Illegal Trade: It is reported that the roots are exported for medicinal properties, but exact figures are not available.
 34. Actual Potential Trade Impact: The rhizomes are used medicinally for the preparation of tonic, stimulant, laxative, diuretic, spasmodic and stomachic. The pale yellow essential oil known as "Spikenard oil" has antiarrhythmic activity and is also reported to promote growth of hair and to impart black colour. The rhizomes are also used in perfumery.
 35. Captive Breeding or Artificial Propagation (outside country of origin): Not known.
4. Conservation and Management:
41. Legal Status:
 411. National: All plants and their derivatives prohibited from export.
 412. International: None so far.
 42. Species Management:
 421. Population Monitoring: Being undertaken in certain areas.
 422. Habitat Conservation: Populations exist within the protected areas of the Himalayan region.
 423. Management Measures: Measures for *in situ* conservation are being undertaken and attempts made to develop and promote cultivation.
 43. Control Measures:
 431. International Trade:
 432. Domestic Measures: The Forest Department, Govt. of U.P. has banned collection of this plant from alpine areas. Collection of roots is also being regulated in other areas. Strategies for *in situ* and *ex situ* conservation are being developed.

5. Information on Similar Species

51. Similarity in Appearance: The roots of this species and *Selinum vaginatum* are sometimes mistaken and adulterated with roots of *Nardostachys jatamansi* but the rhizomes of the latter may be easily recognized by their being solitary or in bunch, densely covered all along with fibres, and withered leaves or leaf bases at apices.

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

6. Comments from Countries of Origin

Unless processed within Nepal this plant is banned from export. Nevertheless a major illegal trade continues.

7. Additional Remarks

Description: Erect, perennial herb, 10-60 cm high. Stems generally pubescent above. Root stock long, stout covered with fibres from the petioles of withered leaves. Leaves radical, elongate, spatulate, longitudinally nerved; cauline 1-2 pairs, subovate or oblong. Flowers in dense heads, rosy, pale pink or blue. Fruits 4 mm long, covered with white hairs.

8. References

Anonymous 1966. *The Wealth of India*. CSIR, New Delhi, Vol. 7: 3-4.

Chowdhery, H.J. 1988. In *Red Data Book of Indian Plants*. eds. M.P. Nayar & A.R.K. Sastry. Vol. 2: 245.

Edwards, David M., 1993. *The marketing of non-timber forest products from the Himalayas: the trade between East Nepal and India* ODI Network Paper 15b.

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

