

AMENDMENTS TO APPENDICES I AND II OF THE CONVENTION

Other Proposals

A. PROPOSAL

Inclusion of *Picrorhiza kurrooa* in Appendix II.

B. PROPONENT

India.

C. SUPPORTING STATEMENT

1. Taxonomy

11. Class: Dicotyledoneae
12. Order: Personales
13. Family: Scrophulariaceae
14. Scientific Name: *Picrorhiza kurrooa* Royle ex Benth., Scroph. Ind. 47. 1835.
15. Scientific Synonyms: None.
16. Common Names:
- |                |                            |
|----------------|----------------------------|
| English:       |                            |
| French:        |                            |
| Spanish:       |                            |
| Beng. & Hindi: | Kuru, Kutki                |
| Guj.:          | Kedu                       |
| Kashmir:       | Kour                       |
| Mal.:          | Kadugurohini, Katukarogani |
| Mar.:          | Kutaki                     |
| Punjabi:       | Karru                      |
| Sans.:         | Katuka, Katurohini         |
| Tam. & Tel.:   | Kadugurohini, Katukarogani |

17. Code Numbers:

2. Biological Data

21. Population Status: Listed in vol.1 of the Red Data Book of Indian Plants as "Vulnerable".
22. Population Trend: Vulnerable.
23. Distribution: Himalayas; from Jammu & Kashmir to Sikkim.
24. Habitat Availability: Alpine Himalayas on rocky slopes at altitudes 3000-5000 m.
25. Geographic Trend: Restricted to alpine Himalayas.

26. Threats: Scarce and at severe threat due to over-exploitation for medicinal properties of its rhizomes.
3. Utilization and Trade
31. National Utilization: Large quantities of rhizomes (roots, root-stock) are collected and marketed for their medicinal properties.
32. Legal International Trade:
33. Illegal Trade: Export is reported but an exact figure is not available.
34. Actual Potential Trade Impact: The drug extracted from the roots known as "Picrorhiza" is used as stomachic, laxative in small doses and cathartic in large doses. The roots also possess properties like that of Indian Gentian (*Gentiana kurroo*) and for this properties it is used either as an adulterant or as a substitute for Indian Gentian.
35. Captive Breeding or Artificial Propagation (outside country of origin): Not known.
4. Conservation and Management
41. Legal Status
411. National: All export banned under Export (Control) Order.
412. International: None so far.
42. Species Management
421. Population Monitoring: Attempt being made on a limited scale
422. Habitat Conservation: Efforts are being made to protect the species in its original habitat.
423. Management Measure: As the species is becoming scarce in its original habitat measures are being taken for *in situ* conservation. The species is propagated through seeds and rhizomes, attempts are being made to cultivate it.
43. Control Measures
431. International Trade: As the plant is scarce in its wild source and as cultivation is not on a scale to meet trade demand, it is suggested that the export ban be strengthened through inclusion in Appendix II of CITES.
432. Domestic Measures: The species is distributed in alpine Himalayas where it is becoming scarce due to over-exploitation. Collection from wild is being regulated. *In situ* & *ex situ* conservation strategy is being undertaken to protect the species.
5. Information on Similar Species
51. Similarity in Appearance: The rhizomes and roots of *Gentiana kurroo* Royle superficially look like those of *Picrorhiza kurrooa*. As the medicinal properties in both the species are more or less similar so the common trade and vernacular name "Kutki" is applied to both. However, *Picrorhiza kurrooa* can be easily distinguished by its rhizomes remaining covered with withered leaf bases while in case of *Gentiana kurroo* the rhizomes are devoid of

withered leaves and leaf bases. Again the leaves of *Gentiana kurroo* are mostly linear-lanceolate whereas the leaves of *Picrorhiza kurroa* are oblanceolate.

52. Nature of Specimen in Trade: Rhizomes (roots and rootstock) which are as thick as little finger, deep greenish-brown in colour and covered with withered leaves, may be marketed intact or in small pieces.

6. Comments from Countries of Origin

61. Range States: Traded through east Nepal from as far as Tibet; 24 tonnes a year traded through Hile & Basantpur in Nepal 1991/92.

7. Additional Remarks

Description: Small, more or less hairy perennial herbs. Rootstocks elongate, stout, as thick as a little finger, covered with withered leaf bases. Leaves obovate-oblanceolate, 5-10 cm long, sharply serrate; scape stout, longer than leaves, many flowers, bracts oblong or lanceolate. Flowers white or pale blue-purple. Capsules ovoid 1-1.5 cm long, turgid.

8. References

Anonymous 1969. *The wealth of India, C.S.I.R., New Delhi*. Vol. 8: 49-50.

Chowdhury, H.J. 1987. In *Red Data Book of Indian Plants* eds. M.P. Nayar & A.R.K. Sastry. Vol. 1: 350-351.

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.

