### A. PROPOSAL

Transfer of Saussurea lappa from Appendix I to Appendix II.

#### B. PROPONENT

Islamic Republic of Pakistan.

# C. SUPPORTING STATEMENT

# 1. Taxonomy

11. Class: Angiospermae/Dicotyledonae

12. Order: Asterales

13. Family: Compositae (Asteraceae)

14. Species: Saussurea lappa

15. Common Names: English: costus, kuth

French: aucklandie, pachak

Spanish:
Urdu: kut
Arabic: kust

Kashmiri: postkhi, kuth

Punjabi: kuth

Hindi: kut, kur, pachak

16. Code Numbers: -

### 2. Biological Data

- 21. <u>Distribution: Saussurea lappa</u> grows on the moist slopes in the north-western Himalayan region. It grows on both sides of the cease-fire line in Kashmir; in Kaghan Siran and Gurez Valleys and Astor in Pakistan; and Himachal Pradesh and Kumaon (Uttar Pradesh) in India. India (1985) reported its distribution in Koksar in Lahul, Gulmerg, Liddar Valley, Tahjwar Mountain and Avta Kashmir.
- 22. Population: Concentrated and healthy populations in the wild over large areas in Neelum, Leepa and Kaghan Valleys and scattered populations in the wild in Poonch and Bagh Districts, Siran Valley, Gurez Valley and Astor in Pakistan. Small populations exist across the cease-fire line in Kashmir, Garhwal and Lahul in India. Cultivated in India, Pakistan and China.
- 23. Habitat: Saussurea lappa grows in open high hill forests/pastures located between 2,134 and 3,962 metres in Pakistan in the temperate region. It grows on the moist steep slopes on well drained soils between 2,100 and 4,000 metres surrounding the valleys at the upper limits of tree growth in India. Its seedlings seem to prefer steep slopes with rich porous soil and cool climate but less rainfall (Sher Singh, 1935).

#### 3. Trade Data

- 31. National Utilization: The plant is well known in Ayurvedic and Tibbi medicine. The root is used as a stomachic, carminative, stimulant and has been held in great esteem in the indigenous system of medicine as an aphrodisiac tonic and a valuable remedy in asthma and chest complaints. It is used in chronic skin diseases and rheumatism. It has also antiseptic and disinfectant properties. An essential oil obtained from its root is used in perfumery in India (Sastry and Datta, 1961). Inhalation of the smoke of the powdered root produces marked depression of the cerebral system (Chopra, 1958). Inulin obtained from the root (18%) is used for the production of fructose (Kulkarni et al., 1969). Dried and powdered root is used as a hair wash (Baden Powal), as well as a protector of Kashmir fabrics from attacks of moths and other vermin.
- 32. Legal International Trade: Large quantities of costus roots have been regularly exported for a long time through the ports of Calcutta and Bombay to China and Red Sea ports. In recent years, the main importing countries are: Hong Kong, France, Singapore, Thailand, Viet Nam, Japan and Sri Lanka (Wealth of India, 1972). Exports from Pakistan have been mostly confined to Japan through Karachi port.
- 33. Illegal Trade: An illegal shipment went from India to France in mid 1986.

## 34. Potential Trade Threats:

- 341. <u>Live Specimens</u>: Live plants are not traded. May enter in trade for cultivation.
- Parts and Derivatives: The collar part of the root and the seeds may enter in trade for use as planting material.

## 4. Protection Status

- 41. National: This species has been proposed to be included in Schedule-II part B of the Indian Wild Life (Protection) Act. In Pakistan, extraction of roots is done departmentally. In Pakistan, roots are not extracted from areas where and when this plant species is subjected to any threat. Extraction of costus roots for commercial purposes by any other agency is completely banned.
- 42. International: This species stands included in Appendix I of CITES since 1985.
- 43. Additional Protection Needs: Enjoys adequate protection in Pakistan. Export up to 10,000 kg. from Pakistan would not threaten the species, whereas the rural people of the area dependent on its extraction would lose interest in its conservation and may start destroying the habitat or plant population if the extraction for export is stopped as this is the only source of income to them. Thus, regularized and systematic extraction as is being done now, is helpful in conserving this plant species.

## 5. Information on Similar Species

The roots of <u>S. hypoleuca</u> are probably used as 'kuth' root in India. However, <u>S. lappa</u> (true kuth root) can be distinguished from <u>S. hypoleuca</u> by the presence of lobately winged petioles, hard stalkless flower heads, dark blue purple or black in colour; achenes curved, not tubercled. <u>S. hypoleuca</u> has small auriculate petioles, leaves lyrate, cottony or whitish beneath, heads long penducled, inclined or nodding, achenes strongly tubercled.

## 6. Comments from Countries of Origin

Saussurea lappa is endemic to Pakistan and India. Its distribution concentration and population in the wild appears more in Pakistan. It is also in cultivation in India, Pakistan and China. It is threatened in India and was thus transferred on India's proposal from Appendix II to Appendix I.

# 7. Additional Remarks

The Indian proposal for transfer was not received by Pakistan before the fifth meeting of the Conference of the Parties to CITES. Hence Pakistan's delegates at the meeting did not have the brief. They could not appreciate the proposal even in the meeting as none of the delegates was a botanist. Moreover, the Indian proposal lacked complete information on the species. The species is, in fact, not endemic to India only.

# 8. References

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