AMENDMENTS TO APPENDICES I AND II OF THE CONVENTION

PROPOSAL Α.

Inclusion of Teinopalpus spp. in Appendix II.

PROPONENT В.

The United Kingdom of Great Britain and Northern Ireland.

SUPPORTING STATEMENT C.

1. Taxonomy

15.

11. Class:

Insecta

12. Order: Lepidoptera

13. Family: Papilionidae

14. Species: Teinopalpus imperialis Teinopalpus aureus

Common Names:

English: Kaiser-I-Hind (Teinopalpus

imperialis)

golden Kaiser-I-Hind (Teinopalpus

aureus)

French:

Spanish:

16. Code Numbers:

None available

2. Biological Data

21. Distribution:

- 211. Teinopalpus imperialis: India (Sikkim, Darjeeling region of West Bengal, Khasia Hills in Meghalaya, Assam and Manipur), Bhutan, Nepal, Burma, China (Sichuan and Hubei Provinces) (1, 4, 5, 19, 12). $\underline{\text{T.}}$ $\underline{\text{i.}}$ $\underline{\text{imperialis}}$ occurs between 2,000 and 3,500 m in Nepal, across north-eastern India and Bhutan to northern Burma and at lower altitudes (over 1,000 m) in China (12). Although distributed over a wide area the species is nevertheless local and rare.
- 212. Teinopalpus aureus: China (Guangdong Province), perhaps also Viet Nam. The species has not been recorded for many years (12, 4).
- 22. Book on Threatened Swallowtails of the World (3).

23. Habitat:

231. Teinopalpus imperialis: The Kaiser-I-Hind is restricted to mountainous wooded districts at an altitude of 2,000-3,500 m in Nepal, north-eastern India and Bhutan, and at

lower altitudes in China. The habitat is mainly broad-leaved evergreen forest, sometimes mixed with conifers (2, 18). The species normally flies high up in the canopy but is known to frequent open areas, including hilltops, where the males will defend mating territories (19, 11). The larval foodplants are species of Daphne (Thymeleaceae) (7, 14, 17).

232. Teinopalpus aureus: The golden Kaiser-I-Hind is a species of montane areas over 1,000 m (12). The habitat requirements are insufficiently known but the habitat is probably montane broad-leaved and coniferous evergreen forest. The larval foodplant is not known (3).

3. Trade Data

31. National Utilization (Teinopalpus imperialis): There is reported to be a substantial market in dead specimens offered by street hawkers in Kathmandu, Nepal (3). This species will doubtless be included in this trade but it is assumed that most specimens are bought by foreigners and will be subsequently exported.

32. Legal International Trade:

- 321. General: The trade in butterflies worldwide is very considerable, running into tens of millions of dollars annually, although the precise figure is disputed (9, 10, 16). The number of commercial dealers has risen dramatically over the last 30 years (15). The bulk of this trade is in the use of butterflies for ornamental purposes but there is also a substantial low volume trade supplying high-value dead specimens to scientists, museums and collectors. The price of these specimens tends to reflect their rarity, size, beauty, the difficulty of capture and the general state of preservation.
- 322. Specific: The extent of legal trade in Teinopalpus spp. is insufficiently known. Permits are required to collect

 T. imperialis in Nepal and the species is also protected in India. It is a beautiful butterly and prized by collectors with advertised prices in the range US\$ 7-150. A pair was advertised in the early 1980s for the equivalent of US\$ 130 (8).
- 33. Illegal Trade (Teinopalpus imperialis): Although a permit is required for collecting this species in Nepal there are reports that foreign entomologists have collected large numbers of this species in the mountains around Kathmandu (3). The legislation is difficult to enforce and it is likely that much of this collecting is illegal. In India the Government passed an amendment in 1980 to the Wildlife Protection Act of 1972 which protects this species from collection (13). Again there are enforcement problems and it is likely that the species is illegally collected by tourists (3).
- 34. Potential Trade Threats: The habitat of <u>Teinopalpus imperialis</u> has been very substantially reduced in central Nepal (6), while in India habitat degradation has occurred in Meghalaya, West Bengal and Sikkim (6). In Bhutan the habitat is vulnerable to

the pressures of grazing and fire (6). Despite its wide range T. imperialis is a rare butterfly which is likely to suffer further loss of habitat. It is subject to collecting pressure at least in Nepal and India and the possibility of over collecting is a matter of concern. Teinopalpus aureus may be widespread in occurrence but is probably very rare. The remaining population may be threatened by habitat loss. The species has not been found for many years but once located unregulated trade could pose a substantial threat. Both species are attractive and likely to be desired by collectors. Collecting needs to be monitored in order to ensure that it is undertaken on a sustainable basis.

4. Protection Status

41. National:

- 411. Teinopalpus imperialis: In Nepal it is necessary to obtain a permit before this species may be collected. In India the nominate sub-species is protected from collection by a 1980 amendment to the 1972 Wildlife Protection Act (3).
- 412. Teinopalpus aureus: None known.
- 42. International: None known.
- 43. Additional Protection Needs:
 - 431. Teinopalpus imperialis: The legislation already enacted in Nepal and India needs to be enforced effectively. There needs to be rational utilization of the forest habitat throughout the range of this species and reserve areas established. Trade needs to be monitored.
 - 432. Teinopalpus aureus: Survey is needed to establish the present distribution of this species. When located the ecological requirements of the golden Kaiser-I-Hind need to be evaluated and reserve areas established and managed for the conservation of this species. Collecting needs to be controlled and trade monitored.

5. Information on Similar Species

Teinopalpus is very distinctive in appearance possessing angular, multi-tailed wings, and dusk-green markings. Confusion with other genera should not occur. Female \underline{T} . imperialis illustrated in Collins and Morris (1985) (3). D'Abrera $\overline{(1982)}$ (4) illustrates both male and female \underline{T} . imperialis and male \underline{T} . aureus.

6. Comments from Countries of Origin

Sought but not yet received.

7. Additional Remarks

None.

8. References

- (1) Antram, C.B., 1924. Butterflies of India. Thacker, Spink & Co., Calcutta and Simla. 226 pp.
- (2) Champion, H.G. and S.K. Seth, 1968. A revised study of the forest types of India. Publication Division, Government of India, Delhi.
- (3) Collins, N.M. & M.G. Morris, 1985. Threatened Swallowtail Butterflies of the World. The IUCN Red Data Book. IUCN, Gland, Switzerland and Cambridge, UK. 401 pp. 8 pl.
- (4) D'Abrera, B., 1982. Butterflies of the oriental region. Part 1.
 Papilionidae and Pieridae. Hill House, Victoria, Australia.
 xxxi + 244 pp.
- (5) Evans, W.H., 1932. The identification of Indian butterflies.

 Bombay Natural History Society. 2nd ed. revised. 454 pp.
- (6) FAO/UNEP, 1981. Tropical forest resources assessment project. Forest resources of tropical Asia. FAO, Rome. 475 pp.
- (7) Ghosh, S.K. and D.K. Mandal, 1983. Review of Kaiser-I-Hind butterfly, Teinopalpus imperialis Hope. Unpublished manuscript. 3 pp.
- (8) Heinkel, Naturwissensch. 1982/1983. Sale catalogue. Lehrmittel, Urbanstr. 20, 7410 Reutlingen, FRG.
- (9) Inskipp, T. and S. Wells, 1979. International Trade in Wildlife. Earthscan, London, 104 pp.
- (10) Jackman, B., 1976. Bye-bye birdwing. Sunday Times, 12 September.
- (11) Jordan, K., 1909. In Seitz, A. Macrolepidoptera fauna Indo-Australasia. 9:17-109.
- (12) Mell, R. 1938. Beiträge zur Fauna Sinica. Deutsche Entomologische Zeitschrift 17:197-345.
- (13) Ministry of Law and Justice, India. 1972. The Wildlife (Protection) Act, 1972 and Revised list of Schedules to the Wildlife Protection Act, 1972 coming into force from 2 October 1980.
- (14) Munroe, E., 1961. The classification of the Papilionidae (Lepidoptera). Canadian Entomologist Supplement 17:1-51.
- (15) Nagano, C.D., 1984. The International trade in butterflies. Unpublished manuscript. 27 pp.
- (16) National Research Council, 1983. Butterfly farming in Papua New Guinea. Managing tropical animal resources series. Academy Press, Washington DC.
- (17) Okano, K., 1983. Some ecological notes on <u>Teinopalpus</u>. Tokurana 5:94-1100 (in Japanese).

- (18) Stainton, J.D.A., 1972. Forests of Nepal. John Murray, London. 181 pp.
- (19) Talbot, G., 1939. The fauna of British India, including Ceylon and Burma. Butterflies vol. I. Taylor and Francis Ltd, London, reprint New Delhi 1975. 600 pp.

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