

Inclusion of swallowtail butterflies *Atrophaneura jophon* and *A. pandiyana* in Appendix II. Proponent: Germany (on behalf of the Member States of the European Community).

Summary: The Ceylon Rose *Atrophaneura jophon*, sometimes considered a subspecies of the Malabar Rose *A. pandiyana*, is a dark swallowtail butterfly found at medium elevations in tropical moist forest in south-west Sri Lanka. It is classified as Critically Endangered by IUCN on the basis of an extremely limited area of occurrence (less than 100 km²). However, a more recent assessment has estimated area of occurrence at around 10 000 km². Its habitat is reportedly threatened by timber extraction and agricultural conversion. There are no data on population trends. It occurs within the Sinharaja Forest Reserve, declared a National Heritage Wilderness Area in 1988. Collection of the species for sale is prohibited and the export of any invertebrate is only allowed under permit for scientific purposes. Evidence for trade is scanty although there are some data from European trade fairs to suggest that limited international trade exists (although this may not be in recently collected specimens). The proposal seeks to include *A. jophon* in Appendix II in accordance with Article II (2a), and *A. pandiyana* in accordance with Article II (2b). *A. pandiyana* is confined to southern India where it was reported in 1985 as uncommon but not considered threatened.

Analysis: There is considerable uncertainty about the current status of *Atrophaneura jophon*. Its range may be very limited in extent and is reportedly contracting. The species is in international trade, though apparently in very limited numbers and possibly not as recently collected specimens. There is no information on the impact of this trade on wild populations, although it may be inferred that such impact is unlikely to be great. It is not clear, therefore, that strict regulation of international trade is needed to prevent this species meeting the criteria for inclusion in Appendix I, nor is it clear that any (hypothetical) collection for international trade is unsustainable. It is therefore unclear whether the species meets the criteria for inclusion in Appendix II, following Resolution Conf. 9.24. It is possible, though arguable, that it currently meets the criteria for inclusion in Appendix I. Inclusion of *A. pandiyana* in Appendix II is predicated on the need to include *A. jophon* in Appendix II.

Supporting Statement (SS)	Additional information
<u>Taxonomy</u>	
Synonyms: <i>Pachliopta jophon</i> and <i>Pachliopta pandiyana</i> .	
<i>A. jophon</i> was formerly considered conspecific with <i>A. (Pachliopta) pandiyana</i> from southern India but is now recognised as a separate species.	
<u>Range</u>	
<i>Atrophaneura jophon</i> : Sri Lanka.	<i>Atrophaneura pandiyana</i> : India
<u>IUCN Global Category</u>	
<i>Atrophaneura jophon</i> : CR B1+2ac.	<i>Atrophaneura pandiyana</i> : not listed

Biological and trade criteria for inclusion in Appendix II

A) Trade regulation needed to prevent future inclusion in Appendix I

A. jophon is classified as Critically Endangered by IUCN, owing to its limited extent of occurrence, less than 100 km². The species was not reassessed in 2000. However, in 1999 a national assessment was carried out that estimated its extent of occurrence at 10 000 km².

Due to its apparent rarity in even undisturbed habitat the species is thought likely to have a small wild population.

There are no data on the impacts of any international trade on the status of the species in the wild.

Supporting Statement (SS)	Additional information
<p><u>B) Harvesting for international trade has, or may have, detrimental impact on population (i) exceeds sustainable yield; (ii) reduces population to potentially threatened level</u></p>	
<p>From September 1996 to November 1997 a total of 38 specimens was recorded as offered for sale at 12 trade fairs across Europe. Although traders may exhibit at a number of fairs, all of these specimens were offered for sale by different traders, with the exception of the nine males and one female (March 1997) and 15 males and one female (October 1997) displayed at two fairs in Prague. However, it is not certain how many of these specimens were newly acquired.</p> <p>One source considers the sale of recently collected <i>A. jophon</i> specimens to be extremely improbable.</p>	<p><i>A search of French, German and Japanese websites and contact with insect specimen dealers did not produce any information indicating that the species was currently for sale (TRAFFIC Europe – France, 2002). One Japanese dealer stated that A. jophon had not been imported for a couple of years (TRAFFIC East Asia – Japan, 2002).</i></p>

Inclusion in Appendix II to improve control of other listed species

Specimens resemble other species and are difficult to distinguish, or most of taxon is already listed

A. pandiyana is proposed for listing because of its similarity of appearance to *A. jophon*.

Other information

Threats

Deforestation and alteration of habitat due to timber extraction and agriculture are considered the main threats to *A. jophon*. There is no evidence to suggest that the species can survive in significantly disturbed or modified habitat. There is no evidence for domestic trade in live or dead specimens in Sri Lanka.

Trioidine swallowtails (which include the genus Atrophaneura) are generally resistant to deforestation, provided there is sufficient woody re-growth to support host plants (Vane-Wright, 2002).

Conservation, management and legislation

The collection for sale of the species is prohibited in Sri Lanka.

A. jophon occurs in the Sinharaja Biosphere Reserve, where the collection of specimens for any purpose is strictly prohibited and a punishable offence. Under the provisions of the Fauna and Flora Protection Ordinance of 1992 the capture of wild animals for commercial purposes requires a permit in Sri Lanka.

The Fauna and Flora Ordinance was amended in 1993. The Ordinance states that no invertebrate specimens may be exported from Sri Lanka, whether dead or alive except under the authority of a permit that will only be issued for scientific purposes including exchange of specimens with foreign museums and zoological gardens.

A. pandiyana is restricted to southern India where it is locally protected (Anon., 2002).

Captive Breeding

There is no evidence of captive breeding.

Other comments

The apparent absence of captive breeding and the ban on export from Sri Lanka other than for scientific purposes indicates that any international trade in recently collected specimens is illegal.

Although listing in the Appendices may draw attention to *A. jophon*, it is already included in the IUCN Red List, and so will be well-known and desirable to collectors.

Vane-Wright (2002) does not support the listing of the species in Appendix II. He believes the real issue to be habitat conservation and management and that listing will draw attention to the species rarity, increase the price, and encourage illegal commercial collection.

Reviewers: TRAFFIC East Asia - Japan, TRAFFIC Europe - France, TRAFFIC Europe - Germany, R.I. Vane-Wright.

References:

Anon., 2002. <http://home.att.net/~bret71/troidini.htm>. Viewed August 2002.

TRAFFIC East Asia - Japan, 2002. *in litt.* to TRAFFIC Europe - France, Paris, France.

TRAFFIC Europe - France, 2002. *in litt.* to IUCN/SSC Wildlife Trade Programme, Cambridge, UK.

Vane-Wright, R.I., 2002. *in litt.* to IUCN/SSC Wildlife Trade Programme, Cambridge, UK.