#### CONSIDERATION OF PROPOSALS FOR AMENDMENT OF APPENDICES I AND II

### Proposals resulting from reviews by the Plants Committees

# A. Proposal

Transfer of Sclerocactus mariposensis from Appendix I to Appendix II.

### B. <u>Proponent</u>

Swiss Confederation.

# C. Supporting Statement

# 1. <u>Taxonomy</u>

1.1 Class: Dicotyledonae

1.2 Order: Caryophyllales

1.3 Family: Cactaceae

1.4 Genus: Sclerocactus

1.4.1 Species: Sclerocactus mariposensis (Hester) N.P. Taylor 1987

1.5 Scientific synonyms: Echinomastus mariposensis Hester 1945

Neolloydia mariposensis (Hester) L. Benson 1969 Echinocactus mariposensis (Hester) Weniger 1970 Pediocactus mariposensis (Hester) Halda 1998

1.6 Common names: English: Lloyd's Mariposa Cactus

French:

Spanish: Huevo de buey

1.7 Code numbers:

### 2. Biological Parameters

#### 2.1 Distribution

Central Coahuila (Mexico) to southwestern Texas (United States of America). The range has an extension of about 350 km (north-south).

# 2.2 Habitat availability

Arid, gravelly, limestone derived soils on gentle slopes in very open habitats with a few shrubs and a great diversity of small xerophytes.

### 2.3 Population status

The Lloyd's mariposa cactus occurs as scattered individuals or occasionally as dense concentrations on hills and ridges in sparse Chihuahuan Desert vegetation.

In the United States of America: Thirty sites in three parts of the Big Bend region of Texas are reported. One area occupies the southern corner of Brewster County, another area occupies the northeastern portion of Big Bend National Park and a third area occupies the eastern

portion of Brewster County north of Black gap Wildlife Management Area (FWS, 1989). In Mexico: The species is reported from various regions in the state of Coahuila, e.g. from south of Monclova, from the Sierra Paila region, from around Cuatro Cienegas and from the Sierra del Carmen region. The rather big potential area of distribution is not well investigated and gaps are rather due to lack of data.

### 2.4 Population trends

The species has a scattered distribution, with occasionally dense colonies on the top of small hills or rock flats. Some populations are reported to show impact of collecting.

### 2.5 Geographic trends

Not applicable.

### 2.6 Role of the species in its ecosystem

Not applicable.

#### 2.7 Threats

The species has been heavily overcollected in the past in the United States of America, as reported in the supporting statement of 1983. Land use seems not to be an important problem, as the habitat is arid and soils rocky. Cattle breeding is a potential critical factor. Some populations in the United States of America are located in protected areas.

### 3. Utilization and Trade

#### 3.1 National utilization

Collected in USA by commercial cactus traders, as reported in the supporting statement in 1983.

### 3.2 Legal international trade

There has been no trade reported in wild specimens. The only exporter is the United States of America and nearly all records are of seeds (A). The only records other than seeds are of 102 live (A) exported to Italy in 1989, 1 live (A) exported to Japan in 1990 and 20 live (A) imported by Germany in 1991 (WCMC, John Caldwell, 1999). Further, there are two CITES registered nurseries, artificially propagating the species: P-CZ-1002 and P-DE-1001.

### 3.3 Illegal trade

Not applicable.

#### 3.4 Actual or potential trade impacts

Not applicable.

### 3.5 Captive breeding or artificial propagation for commercial purposes (outside countries of origin)

Two CITES registered nurseries: P-CZ-1002 and P-DE-1001

### 4. Conservation and Management

### 4.1 Legal status

#### 4.1.1 National

United States of America: Listed as threatened under the Endangered Species Act

since November 1979. Removal and possession from federal lands.

Mexico: Export of wild collected specimens prohibited (Legislation?).

#### 4.1.2 International

Included in Appendix II since 1975; transferred to Appendix I in 1983.

#### 4.2 Species management

# 4.2.1 Population monitoring

United States of America: The latest study in the Big Bend National Park dates from 1985 (Heil *et al.*, 1985).

#### 4.2.2 Habitat conservation

United States of America: The species is found on Federal Land in Big Bend National Park and private land, partly owned by the Lajitas Foundation.

#### 4.2.3 Management measures

Not applicable.

#### 4.3 Control measures

#### 4.3.1 International trade

Not applicable.

#### 4.3.2 Domestic measures

Not applicable.

#### 5. Information on Similar Species

Turbinicarpus beguinii (N. P. Taylor) Mosco & Zanovello comes quite close, but has not chalky-white, but glassy-transparent radial spines and distinctively black tipped central spines.

#### 6. Other Comments

The Management Authority of the United States of America provided the following comments:

Sclerocactus mariposensis is listed as Threatened under the U.S. Endangered Species Act, partially due to the significant reduction and extirpation of sites of this taxon by amateur and commercial collectors. The U.S. Recovery Plan for this species specifically recommends that CITES protection be maintained at the highest possible level. International demand for this species is clearly documented in the United States CITES Annual Report data for the years 1994-1997, which indicate an average of 48 export shipments of artificially propagated seeds of *S. mariposensis* per year, with an average of 2,225 seeds per shipment, primarily to Europe and Japan.

The Management Authority of Switzerland has kindly provided us with additional information regarding the distribution and abundance of *S. mariposensis* in Mexico, where it is apparently more secure than once thought. In addition, the results of a recent study of *S. mariposensis*, which came to our attention since we conducted our review of this species, suggest that its classification under the Endangered Species Act may warrant reconsideration. We will consider proposing to transfer this taxon to Appendix II in the future, pending continued monitoring of trade and clarification of its status in the wild. We believe that such an action would be premature at this time, however, particularly since strict control of trade is currently recommended for recovery.

### 7. Additional Remarks

- Although declared popular by collectors, it is rather rare in cultivation and certainly not one of the easy species to grow successfully.
- The taxon does not seem to meet the criteria for inclusion in Appendix I, if the whole range of distribution is considered. The supporting statement for Appendix I-listing in 1983 mentioned, that the species is extensively exploited by commercial cactus collectors in the United States of America, what could be rather a national conservation problem, as no international trade in wild-collected specimens has been reported (WCMC 1999). Occurrence in Mexico was quoted with a question mark in 1983. But the main area of distribution, as reported today, is certainly Mexico, where the species is not reported to be specifically threatened by international trade or other, national factors.
- The Plants Committee therefore recommends that the species be transferred from Appendix I to Appendix II.

# 8. References

Heil, K.D., S. Brack and J.M. Porter. 1985. The Rare and Sensitive Cacti of Big Bend National Park. National Park Service, Santa Fe, New Mexico.