CONSIDERATION OF PROPOSALS FOR AMENDMENT OF APPENDICES I AND II

A. Proposal

To amend the text in current annotation °608 referring to artificially propagated specimens of *Gymnocalycium mihanovichii* (cultivars) forms lacking chlorophyll, to read:

> "*Cactaceae* spp. colour mutants lacking chlorophyll, grafted on the following grafting stocks: *Harrisia* "Jusbertii", *Hylocereus trigonus* or *Hylocereus undatus*."

B. Proponent

Switzerland.

C. Supporting statement

1. Taxonomy

1.1 Class:	*Angiospermae* (Angiosperms; Flowering Plants)	
1.2 Order:	*Caryophyllales*	
1.3 Family:	*Cactaceae*	
1.4 Genus and species:	all taxa listed in Appendix II	
1.5 Scientific synonyms:	none	
1.6 Common names:	English:	Strawberry Cactus, Ruby Ball
	French:	
	Spanish:	
1.7 Code numbers:		

2. Biological parameters

These parameters are not applicable for this proposal, since it does not refer to wild-collected or naturally occurring specimens.

The proposed exemption applies exclusively to artificially propagated colour mutants, which can not survive outside horticulture. Rather these colour mutants partly or totally lack vital functions and therefore can only survive as grafted specimens, obtaining their nourishment from a green stock plant with which they are united.

As already stated for CoP10 document Prop. 10.68, this proposal is in accordance with the provisions of paragraph f) under the second RESOLVES in Resolution Conf. 9.24:

> "Species of which all specimens in trade have been artificially propagated should not be included in the Appendices if there is no probability of trade taking place in specimens of wild origin."

3. Utilization and trade

3.1 National utilization

Not relevant for the proposal.

3.2 Legal international trade

WCMC has analysed the data stored in the WCMC Trade Database for CoP10 document Prop. 10.68 in order to determine the volumes of specimens. However, when making this analysis, WCMC noted that there are significant problems with the interpretation of the data, due to incomplete and/or inadequate reporting.

There is an enormous trade in artificially propagated, grafted specimens of colour mutants of *Cactaceae* spp., such as *Gymnocalycium* spp., *Echinopsis chamaecereus* H. Friedrich & Glaetzle and *Parodia scopa* (Sprengel) Taylor. The most important exporting countries are Brazil, Japan and the Republic of Korea. In 1993 the volume of international trade in colour mutants of *Gymnocalycium mihanovichii* (Fric & Guerke) Britton & Rose alone was approximately 3.3 millions live plants, as stated in CoP10 document Prop. 10.68.

3.3 Illegal trade

Not known to exist, as stated in CoP10 document Prop. 10.68.

3.4 Actual or potential trade impacts

Not relevant, as no natural populations are involved. It is important to note that these colour mutants are exclusively products of horticulture and do not occur otherwise.

3.5 Artificial propagation for commercial purposes (outside country of origin)

The first known colour mutant of a cactus was found in 1941 in Japan. It was a red coloured seedling plant of *Gymnocalycium mihanovichii* without chlorophyll (the pigment that gives the green colour to plants). It was kept alive by grafting, as it would not have been able to survive otherwise. Today, there are more than 50 named colour mutants of *Gymnocalycium mihanovichii*.

Since 1970 additional colour mutants of *Cactaceae* spp., such as *Gymnocalycium* spp. (e.g. *Gymnocalycium denudatum* [Link & Otto] Pfeiffer ex Mittler and *Gymnocalycium* "Pentacanthum" Hort.), *Echinopsis chamaecereus* and *Parodia scopa* have been developed and entered international trade in enormous quantities. They are propagated vegetatively by using the offsets of grafted mother plants. The specimens of colour mutants are all grafted onto artificially propagated cactus grafting stocks. These grafting stocks are produced from selected mother plants, mostly *Harrisia* "Jusbertii" and *Hylocereus* spp.

4. Conservation and Management

4.1 Legal status

4.1.1 National

Not applicable, as no range States exist.

4.1.2 International

Included in Appendix II of CITES under *Cactaceae* spp. in 1975. At CoP10, document Prop. 10.68 was adopted and consequently colour mutants of *Gymnocalycium mihanovichii*

were excluded from CITES through annotation º608. At that time the colour mutants of other *Cactaceae* spp., such as *Gymnocalycium* spp., *Echinopsis chamaecereus* and *Parodia scopa* were not included in the proposal and thus remained included in CITES.

4.2 Species management

Not applicable, as no natural populations exist.

4.3 Control measures

Colour mutants of *Cactaceae* spp., such as *Gymnocalycium* spp., *Echinopsis chamaecereus* and *Parodia scopa* are very easily distinguished from naturally occurring cacti. There is no risk of confusion. Some characteristics are:

- non-green stem, showing many variants of red, pink, orange or yellow colouring, sometimes variegated
- always grafted on green stocks
- traded in large volumes by specialised traders in supermarket plants
- completely uniform in size and form; free of pests, disease and damage
- very artificial appearance

4.3.1 International trade

The annual production of *Gymnocalycium mihanovichii* alone, mainly from Brazil, Republic of Korea and Japan has been estimated to be 10-15 million specimens in CoP10 document Prop. 10.68.

4.3.2 Domestic measures

Not applicable, as no natural populations exist.

5. Information on Similar Species

This proposal exclusively relates to artificially propagated specimens of grafted colour mutants that are not found outside horticulture. These grafted colour mutants are very easily identifiable, as explained above, under 4.3. Further, the proponent of CoP10 document Prop. 10.68, the Kingdom of Denmark has already prepared identification material for *Gymnocalycium mihanovichii* colour mutants. This identification material has been distributed at CoP10.

6. Other Comments

This proposal is related to a former proposal on the same issue. CoP10 document Prop. 10.68 intended to implement Resolution Conf. 9.24, as explained under 2. above. It was adopted by consensus at CoP10 and implemented with annotation °608. This annotation excludes colour mutants of *Gymnocalycium mihanovichii* from CITES. However, other colour mutants of *Cactaceae* spp. remained included in CITES.

As colour mutants other than *Gymnocalycium mihanovichii* are in international trade in significant quantities, and such other colour mutants are often traded in mixed shipments together with *Gymnocalycium mihanovichii*, the existing exemption unfortunately is of limited benefit and needs amplification to be more effective.

In fact, further colour mutants of *Cactaceae* spp. already exist in cultivation and it has to be expected that additional new colour mutants will arise in artificial propagation. Some of these are likely to enter the market in the future.

Furthermore, there have been some recent changes in the preferred names of *Gymnocalycium*, that could lead to enforcement problems. The most frequently traded colour mutants of the genus *Gymnocalycium* don't belong to *Gymnocalycium mihanovichii* in a strict sense, but to its variety *friedrichii* Werdermann. Now this taxon is treated as a separate species in the 2nd edition of the CITES Cactaceae checklist. Its valid name on species level is *Gymnocalycium stenopleurum* Ritter (as the combination *Gymnocalycium friedrichii* [Werdermann] Pazout is invalid). Thus, annotation °608 is no longer clearly applicable to all colour mutants that were originally intended to be excluded from CITES under *Gymnocalycium mihanovichii*. The trade will not be inclined to quickly adapt to new nomenclature and continue to apply the traditional name *Gymnocalycium mihanovichii* var. *friedrichii*. But CITES enforcement is based on the names of the new checklist. In view of this conflict, it is therefore advisable to reformulate the exemption in a more general manner.

7. Additional Remarks

So far and since 1997, there are no reports to CITES on difficulties with implementation of the already existing exemption of colour mutants. It is therefore most likely, that no enforcement problems have to be expected, if this proposal to exclude further colour mutants of *Cactaceae* spp. from CITES is accepted. In contrary, problems with nomenclature, as outlined under 6. above, could be avoided and the implementation would become more unequivocal with an amplification of the exemption.

If necessary, the Plants Committee will define, what colour mutants of *Cactaceae* spp. fall under the proposed, amplified exemption.

8. References

Hunt, D. (1999): Cites Cactaceae Checklist, 2nd edition. Royal Botanic Gardens Kew, United Kingdom.

Metzing, D. (in lit): Comments on names in the geuns Gymnocalycium.

Pilbeam, J. (1995): Gymnocalycium. A Collector's Guide. A. A. Balkema, Rotterdam, Brookfield.

CoP10 document Prop. 10.68.