AMENDMENTS TO APPENDICES I AND II OF THE CONVENTION

Other Proposals

A. PROPOSAL

Transfer of Phragmipedium spp. from Appendix II to Appendix I.

B. PROPONENT

The Federal Republic of Germany.

C. SUPPORTING STATEMENT

1. Taxonomy

11. Class: Angiospermae
12. Order: Orchidales
13. Family: Orchidaceae
14. Genus: Phragmipedium spp. (Pfitz., 1894) Rolfe, 1896 (see List of Species)
16. Code Numbers:

2. Biological Data

21. Distribution: Tropical regions of Middle and South America. The distribution ranges from the South of Mexico into Guyana and along the Andean region into Bolivia. Two species occur in the East of Brazil (see Distribution Map).

22. Population: Population data are scarce. The population is difficult to estimate, because of its relatively broad range and its occurrence up to 2,000 m in altitude. P. caudatum was once common in parts of Peru where it is now virtually extinct. It has been collected very heavily for export. This species is now very difficult to find in commercial numbers (15-25) whereas before it was easy to collect 100-200 from a small locality covering 10-20 hectares. P. caudatum is endangered quite seriously despite its wide habitat adaptation (Bennett in litt., 1989).

In Peru P. ecuadorense is quite rare and P. cariciinum is subject to imminent danger of depletion (Bennett in litt., 1988).

Phragmipedium besseae has remained undiscovered until 1981 and it would not seem likely that such a striking flower is widespread in the wild (Hagedus & Stermitz, 1986). According to environmental activists in Peru P. besseae is very near
extinction in Peru due to excessive depredation in the past 6 years (Thompson Campbell in litt., 1988; Sheeline in litt., 1988).

One population of *P. exstaminodium*, which has been first described in 1984 (Castano et al., 1984), is already extinct; the only other one known is threatened by collecting and the destruction of its habitat by slash and burn cultivators (IUCN, 1988). A new species recently discovered in southern Mexico will soon be published and is also very rare, known only from a few specimens and one or two localities (Hágsater in litt., 1988).

23. Habitat: The phragmipediums vary in their habitat from being truly epiphytic to lithophytic on mossy rocks, or predominantly terrestrial, usually on grassy banks (Hawkes, 1965). Most of the species occur in mountainous regions between 300-2,000 m above sea level.

The destruction of tropical forests means a serious threat to the whole genus *Phragmipedium*.

For example, habitat destruction coupled with massive, highly selective depredation has reduced the normal population of *P. caudatum* in Peru and has greatly endangered this species (Bennett in litt., 1989).

3. Trade Data

31. National Utilization: Slipper orchids are sometimes used in preparation of folk remedies. They are at all palatable, but the slow growth rate limits culinary usage (Atwood, 1984).

32. Legal International Trade: The trade in species of *Phragmipedium* has undoubtedly increased dramatically in the past few years. Dr. Cribb (Royal Botanic Gardens Kew) has seen large importations of jungle-collected plants in California and Europe (Cribb in litt., 1988).

There is a great international interest in these species among hobbyists and horticulturists. For instance they were offered in the USA in 1986-1988 for US$ 4-40 each as imported plants from Brazil and Peru. In the Federal Republic of Germany you can get them now (1988) for DM 30-100 each.

*Phragmipedium besseae*, in which cultivation and artificial propagation remains problematical at this time (Hagedus & Stermitz, 1986; Bergstrom, 1988), is offered for US$ 125-500 in the USA and for DM 300 in F.R. Germany in 1988 (see Annex 3).

The 1984 discovered *Phragmipedium exstaminodium* had already been offered one year later in the F.R. Germany for DM 40-60 (see Annex 3).

About 100 plants of *P. exstaminodium* were once introduced as *P. cadatum* into the United States, about 15 years ago. Dr. Hágsater saw also large amounts of *P. besseae* which were sold in Ecuador. (Hágsater in litt., 1988).
In 1985 no less than 60,000 plants of *P. pearcei* were systematically collected and exported in only a few shipments by one Peruvian exporter (Bennett *in litt.*, 1989).

**Imports**

**Australia**
- 1984: 18 Brazil (a)
- 1985: 3 Brazil (a)
- 1986: 110 Peru (a), 56 Brazil (a), 9 USA (a)

**Bermuda**
- 1985: 7 Ecuador (a)
- 1986: 20 Peru (a)

**Federal Republic of Germany**
- 1984: 54 Guatemala, 40 Brazil
- 1985: 70 Peru
- 1986: 265 Peru (a), 115 Peru, 43 Brazil (a)
- 1988: 1240 Peru, 61 Brazil (until October 1988)

**Japan**
- 1983: 174 USA
- 1985: 30 Brazil, 30 Peru
- 1986: 86 Peru (a), 16 Peru, 10 Brazil (a), 2 USA (a)

**Netherlands**
- 1984: 16 Brazil (a), 10 Guatemala
- 1985: 10 Peru (a), 5 Brazil (a)
- 1986: 10 Peru (a), 5 Brazil (a)

**Switzerland**
- 1984: 1 F.R. Germany (a)

**United Kingdom**
- 1977: 40 Peru, 3 USA, 2 Netherlands (Peru)
- 1978: 40 Peru, 20 Costa Rica, 2 USA, 1 Netherlands (Peru)
- 1979: 19 Panama, 2 Colombia
- 1981: 20 Guatemala, 14 Colombia, 2 Mexico, 1 Panama
- 1982: 12 South Africa, 9 USA
- 1984: 10 Guatemala, 2 USA (a)
- 1986: 10 Brazil (a)

**United States of America**
- 1977: 9 kg live Ecuador, 2 shipments live Ecuador
- 1978: 1 Brazil
- 1979: 561 Ecuador, 108 Peru, 6 Brazil, 4 Costa Rica, 2 Panama, 1 Guyana, 1 Venezuela
- 1980: 500 Guyana, 309 Ecuador, 80 Peru, 22 Panama, 3 Brazil
- 1981: 335 Peru, 30 Peru (a), 14 Panama, 6 Brazil (a), 10 pieces Brazil
- 1982: 360 Guatemala (a), 220 Colombia, 150 Ecuador, 100 pieces Brazil, 56 Panama, 8 Panama (a), 21 Peru (a), 1 Denmark (a), 1 United Kingdom (a)
- 1983: 425 Colombia (a), 382 Peru (a), 29 Peru, 109 Brazil, 68 Panama, 16 Panama (a), 29 Guatemala, 5 Ecuador, 1 Dominica
<table>
<thead>
<tr>
<th>Year</th>
<th>Countries/Exports</th>
</tr>
</thead>
<tbody>
<tr>
<td>1984</td>
<td>Guatemala, 233 Colombia, 131 Costa Rica, 105 Panama, 68 Brazil, 34 Peru, 11 Ecuador, 6 United Kingdom, 5 France (a), 1 Japan (a)</td>
</tr>
<tr>
<td>1985</td>
<td>Peru, 229 Brazil (a), 165 Brazil, 205 Ecuador, 60 F.R. Germany (a), 25 Colombia, 6 Colombia (a), 2 Canada, 2 Costa Rica</td>
</tr>
<tr>
<td>1986</td>
<td>Peru, 680 Peru (a), 866 Colombia (a), 67 Brazil, 1 Brazil (a), 50 Ecuador, 4 Costa Rica (a), 3 Venezuela (a), 1 derivative F.R. Germany</td>
</tr>
<tr>
<td>1987</td>
<td>only from Peru 2167 obtained from the wild (Thompson Campbell in litt., 1988)</td>
</tr>
</tbody>
</table>

**Exports**

<table>
<thead>
<tr>
<th>Country</th>
<th>Export Details</th>
</tr>
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<tbody>
<tr>
<td>Australia</td>
<td>1986: 5 USA (a), 2 New Caledonia (a)</td>
</tr>
<tr>
<td>Colombia</td>
<td>1986: 876 USA (a), 180 Japan (a), 6 Panama (a), 5 Canada (a), 5 F.R. Germany (a)</td>
</tr>
<tr>
<td>Costa Rica</td>
<td>1984: 6 USA, 4 F.R. Germany</td>
</tr>
<tr>
<td>Denmark</td>
<td>1982: 1 USA (a)</td>
</tr>
<tr>
<td>Ecuador</td>
<td>1984: 2 USA, 1985: 74 USA, 36 USA (dried plants), 22 Canada, 6 Caribbean, 1986: 50 USA</td>
</tr>
<tr>
<td>Federal Republic of Germany</td>
<td>1986: 21 USA (a), 3 Switzerland (a), 2 Austria (a), 1 Canada (a), 1 Japan (Brazil) (a)</td>
</tr>
<tr>
<td>Guatemala</td>
<td>1982: 360 USA (a), 250 F.R. Germany (a), 50 Belgium (a), 60 Japan (a), 25 United Kingdom (a), 20 Denmark (a), 18 Netherlands (a)</td>
</tr>
<tr>
<td></td>
<td>1983: 76 F.R. Germany, 53 USA, 20 United Kingdom</td>
</tr>
<tr>
<td></td>
<td>1984: 873 USA, 226 F.R. Germany, 30 Japan, 30 United Kingdom, 25 Denmark, 20 Australia, 10 Netherlands, 2 Italy</td>
</tr>
<tr>
<td></td>
<td>1985: 875 USA, 226 F.R. Germany, 30 United Kingdom, 30 Japan, 25 Denmark, 20 Australia, 10 Netherlands, 2 Italy</td>
</tr>
<tr>
<td>Netherlands</td>
<td>1984: 1 France (a), 1 Switzerland (a)</td>
</tr>
<tr>
<td>Panama</td>
<td>1980: 1 Canada, 1981: 3 USA</td>
</tr>
<tr>
<td>United Kingdom</td>
<td>1976: 1 Netherlands, 1977: 10 New Zealand, 1 F.R. Germany, 1 Netherlands, 1978: 1 Canada, 1984: 6 USA (a)</td>
</tr>
<tr>
<td>Year</td>
<td>Importing Countries</td>
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<td>---------------------</td>
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<tr>
<td>1979</td>
<td>Australia, Italy, United Kingdom</td>
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<tr>
<td>1980</td>
<td>Japan, Italy, Canada, Philippines, South Africa</td>
</tr>
<tr>
<td>1981</td>
<td>Japan, Canada, Austria, Australia, Costa Rica, Italy, F.R. Germany, Mexico, United Kingdom</td>
</tr>
<tr>
<td>1982</td>
<td>Japan, Canada, United Kingdom, New Zealand, F.R. Germany, Hong Kong</td>
</tr>
<tr>
<td>1983</td>
<td>Japan, Australia, South Africa, Canada, New Zealand, Country unknown</td>
</tr>
<tr>
<td>1984</td>
<td>Japan, Canada, Brazil, New Zealand</td>
</tr>
<tr>
<td>1985</td>
<td>Canada, Australia, Bermuda</td>
</tr>
<tr>
<td>1986</td>
<td>Kenya, Switzerland, Canada, Australia, United Kingdom, New Zealand, Belgium, Japan, Hong Kong, Country unknown</td>
</tr>
</tbody>
</table>

Venezuela 1985: 30 Australia (a)

(Ref.: WIMU Trade Data)

(a) = artificially propagated
(Peru) = country of origin

**Imports of Phragmipedium besseae:**

<table>
<thead>
<tr>
<th>Country</th>
<th>Year</th>
<th>Count</th>
<th>Country</th>
</tr>
</thead>
<tbody>
<tr>
<td>Federal Republic of Germany</td>
<td>1986</td>
<td>50 Peru (a)</td>
<td></td>
</tr>
<tr>
<td>United States of America</td>
<td>1985</td>
<td>20 Peru</td>
<td></td>
</tr>
<tr>
<td></td>
<td>1987</td>
<td>20 Peru</td>
<td></td>
</tr>
</tbody>
</table>

(Ref.: WIMU Trade Data; Thompson Campbell in litt., 1988; Jelden pers. com., 1988)

33. **Illegal Trade:** Extent unknown, but likely to exist in this large-flowered species. Many plants are sent from Ecuador (possibly also from Chile, Colombia and Mexico) to Peru and from there to third-countries.

P. besseae is being exported from Peru. A company in the USA (J and L Orchids) received a shipment in December 1988 from an exporter in Peru possibly identified as P. boisserianum (Wiesman in litt., 1988).

According to Bennet (in litt., 1989) all exports of Phragmipedium from Peru are essentially illegal because "there is no Scientific Authority being consulted by the Management Authority for the
identification of the species to be exported, and to advise whether the number of orchids to be exported might endanger the normal population in the area from which they were collected. The Peruvian requirements to obtain an export permit are that "the exporter must have the orchids identified by any biologist" and that he has paid "to the Ministry of Agriculture for the extraction of the orchids from the forest".

It may be also possible that many plants declared as artificially propagated from the countries of origin may be obtained from the wild. This often means that the plants had been grown under nursery conditions for a short time prior to their export.

34. Potential Trade Threats:

34.1 Live Specimens: The trade in Phragmipedium species has largely increased in the last years. There is a great demand for wild-collected plants (see Annex 3), because it is easier and cheaper to get them from the wild than to rise them from seeds or tissue-cultures. Propagating from seeds or tissue-cultures takes 2-4 years until the plant flowers, it is then ready for export. Although great efforts are being made, artificial propagation in the genus Phragmipedium is difficult and only well established in some species and horticultural hybrids.

The Asociación Mexicana de Orquideología A.C. has an ongoing conservation project for P. extaminodium to try and locate viable populations, to see the possibility of their conservation and to promote its artificial propagation (Hågsater in litt., 1988).

In P. besseae hybrids are not known at present, but are awaited soon in account of the bright colour of her flowers (Senghas & Bockemühl, 1988). In the F.R. Germany an orchid dealer has succeeded in artificial propagation of P. besseae from seed (Senghas pers. com., 1988). According to Hågsater (in litt., 1988) Father Angel Andreetta in Cuenca cultivates and propagates this species easily with new growth produced from old stolons and its propagation by vegetative division in the Andean countries seems a very worthwhile commercial project for export.

Moreover the phragmipediums are difficult to keep in cultivation and not plants for beginners (Mergner, 1985). As a result there is always a ready market for wild-collected plant. Both species, P. besseae from N. Peru and Ecuador and P. extaminodium from Mexico are particularly threatened by trade. According to Dr. Cribb (Royal Botanic Gardens Kew) every known colony of P. besseae has been stripped by collectors (Cribb in litt., 1988).

The principal exporter of Peruvian orchids, Mr. Manuel Arias S., has hired the Ecuadorian who discovered the habitat in Ecuador of P. besseae to come to Peru to assist him in finding new localities so as to continue his very profitable exportations of P. besseae (Bennett in litt., 1989). In the opinion of Dr. Hågsater P. besseae is a
common species usually found in very safe natural habitat although some localities have been completely depleted of their plants (Högerter in litt., 1988).

The native population in Peru has been made aware that the plants are valuable and will be purchased by commercial collectors. In one locality in the Cordillera Azul in Peru, that has at least 750 plants of *P. boissierianum* in an area of 1.5 hectares, the entire population has been stripped and exported by one man (Bennett in litt., 1989).

A lot of orchid collecting expeditions into the countries of origin (see Annex 3), offered by travel agencies, will also mean a great threat.

342. **Parts and Derivatives**: Traded almost exclusively as whole plants. In 1985 there was one account of 36 dried plants from Ecuador to USA. There may be some collecting of seeds, cuttings and flowers by tourists and orchid collecting expeditions.

4. **Protection Status**

41. **National**:

- **Ecuador**: Commercial export prohibited (Ley Forestal y de Conservación de Areas Naturales y Vida Silvestre No. 74, 1981).


- **Mexico**: Commercial export prohibited except artificially propagated orchids (Bases de Control y Regulación de Exportaciones e Importaciones de Fauna Silvestre y Sus Productos Derivados, 1982).

- **Nicaragua**: Commercial export prohibited (Decreto No. 625, 1977).

Other countries: Unknown.

42. **International**: The whole genus *Phragmipedium* is included in Appendix II of CITES.

43. **Additional Protection Needs**: The wonderful flowers of these plants, resembling those of *Paphiopedilum* spp., cause a great demand by orchid collectors and hobbyists. Since the trade in *Paphiopedilum* spp. has been more and more controlled many orchid dealers tend to import and sell phragmipediums. This high collecting-pressure on populations, in combination with alteration of their habitats, has caused that some species, especially the rare *Phragmipedium bessae*, became endangered. According to Cribb (pers. comm. to Schneckenburger, 1988) and some environmental activists in Peru (Thompson Campbell in litt., 1988; Sheeline in litt., 1988) it is already threatened with extinction.

The transfer of the genus *Phragmipedium* to Appendix I will encourage the artificial propagation of these species and, therefore, help to reduce demand for wild-collected specimens.
It is rarely possible, even for an orchid specialist, to identify individual orchid plants when they are not in flower (Stewart, 1986). Especially in the genus Phragmipedium not flowering species are very difficult to distinguish (Senghas pers. comm., 1988). Commercial collectors in Peru export the great majority of their jungle collected specimens without flowers (Sheeline in litt., 1988). So for look-alike reasons it is not practical to put only a few species in Appendix I.

5. Information on Similar Species

There is a great similarity to the whole genus Paphiopedilum. Hybrids between these genera are known to exist (Wimber & Hanes, 1985). The genera Cypripedium, Selenipedium and Phragmipedium also resemble one another.

The species of Phragmipedium are often listed under the genera Paphiopedilum and Cypripedium (for synonymy see List of Species).

6. Comments from Countries of Origin

Belize: Support the proposal (Rosado in litt., 1988).

Mexico: Objects to the proposal, because in their opinion there isn't any trade in these species and because there are several studies on artificial propagation (De la Garza Garcia in litt., 1988).

7. Additional Remarks

Mr. David E. Bennett, Jr., the Co-ordinator of the Orchid Group ECCO (IUCN) in Peru, has proposed to put P. besseaee in Appendix I of CITES to the CITES Management Authority of Peru in 1987, because this species is now virtually extinct in Peru. He now feels very strongly that the whole genus Phragmipedium needs very prompt additional protection in Appendix I of CITES (Bennett in litt., 1989).

8. References


De la Garza García, G. (CITES Management Authority, Mexico) in litt. to Mr. Ulrich (CITES Management Authority, F. R. Germany), 14 December 1988.


Sheeline, L. (TRAFFIC USA) in litt. to L. Körs, 9 November 1988.


Wiesman, M. (Pet Hospital, USA) in litt. to Dave Bennett (Asociación de Ecología y Conservación, Perú), 28 December 1988.

# Annex 1: List of Species

**Phragmipedium:**

(Genera synonymy: Phragmopedilum, Cypripedium, Paphiopedilum and Selenipedium spp.)

<table>
<thead>
<tr>
<th>Name</th>
<th>Synonymy:</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>P. besseae</strong></td>
<td>Dodson &amp; Kuhn</td>
</tr>
<tr>
<td><strong>P. boissierianum</strong></td>
<td>(Reichb. f.) Rolfe</td>
</tr>
<tr>
<td><strong>P. caricinum</strong></td>
<td>(Lindl. &amp; Paxt.) Rolfe</td>
</tr>
<tr>
<td><strong>P. caudatum</strong></td>
<td>(Lindl.) Rolfe</td>
</tr>
<tr>
<td><strong>P. ecuadorensense</strong></td>
<td>Garay</td>
</tr>
<tr>
<td><strong>P. extaminodium</strong></td>
<td>Castano et al.</td>
</tr>
<tr>
<td><strong>P. kaieteurum</strong></td>
<td>(N.E.Br.) Garay</td>
</tr>
<tr>
<td><strong>P. klotzschianum</strong></td>
<td>(Reichb. f.) Rolfe</td>
</tr>
<tr>
<td><strong>P. lindleyanum</strong></td>
<td>(Schomb. ex. Lindl.) Rolfe</td>
</tr>
<tr>
<td><strong>P. lindenii</strong></td>
<td>(Lindl.) Dressler &amp; Williams</td>
</tr>
<tr>
<td><strong>P. longifolium</strong></td>
<td>(Reichb. f. &amp; Warsz.) Rolfe</td>
</tr>
<tr>
<td><strong>P. pearcei</strong></td>
<td>(Reichb. f.) Rauh &amp; Senghas</td>
</tr>
<tr>
<td><strong>P. sargentianum</strong></td>
<td>(Rolfe) Rolfe</td>
</tr>
</tbody>
</table>

(include **P. czerwiakowianum**
(Reichb. f.) Rolfe,
**P. reticulatum**
(Reichb. f.) Rolfe,
**P. boisseranum**
(Cypripedium humboldtii)
(P. ecuadorensense)
(P. caudatum.
P. warscewiczianum)
(P. lindleyanum var. kaieteurum)
(P. klotzscheanum)
(P. lindenii,
Uropedium lindenii)
(include **P. dariense**
(Reichb. f.) Garay,
P. gracile Hort.,
P. hartwegii
(Reichb. f.) Pfitz,
P. hinecksianum
(Reichb. f.) Garay,
P. roezlii
(Reichb. f.) Garay)
Annex 1 - page 2 -

P. schlimii  
(lindl. & Reichb. f.) Rolfe

P. vittatum  
(Vell.) Rolfe

P. wallisii  
(Reichb. f.) Garay

P. warscewiczianum  
(Reichb. f.) Garay
<table>
<thead>
<tr>
<th>Species</th>
<th>Distribution</th>
</tr>
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<tbody>
<tr>
<td>P. besseae</td>
<td>Ecuador, Peru</td>
</tr>
<tr>
<td>P. boissierianum</td>
<td>Ecuador, Peru</td>
</tr>
<tr>
<td>P. caricinum</td>
<td>Bolivia, Peru</td>
</tr>
<tr>
<td>P. caudatum</td>
<td>Colombia, Ecuador, Panama, Peru, Venezuela</td>
</tr>
<tr>
<td>P. ecuadorensense</td>
<td>Ecuador, Peru</td>
</tr>
<tr>
<td>P. exstaminodion</td>
<td>Mexico</td>
</tr>
<tr>
<td>P. kaieteurum</td>
<td>Guyana, Venezuela</td>
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<tr>
<td>P. klotzschianum</td>
<td>Guyana, Venezuela</td>
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<tr>
<td>P. lindleyanum</td>
<td>Guyana, Venezuela</td>
</tr>
<tr>
<td>P. lindenii</td>
<td>Colombia, Ecuador, Venezuela</td>
</tr>
<tr>
<td>P. longifolium</td>
<td>Colombia, Costa Rica, Ecuador, Panama, Peru</td>
</tr>
<tr>
<td>P. pearcei</td>
<td>Ecuador, Peru</td>
</tr>
<tr>
<td>P. sargentianum</td>
<td>Brazil</td>
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<td>P. schlimii</td>
<td>Colombia</td>
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<tr>
<td>P. wallisi</td>
<td>Ecuador</td>
</tr>
<tr>
<td>P. warszewiczianum</td>
<td>Colombia, Middle America</td>
</tr>
</tbody>
</table>
PHRAGMIPEDIUM LONGIFOLIUM (Rchb. f. & Warsc.) Rolfe

(Dodson, C.H. & P.M. Dodson, 1980)
PHRAGMIPEDION RETICULATUM (Rchb. f.) Garay

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Icones Plantarum Tropicarum

(Dodson, C.H. & P.M. Dodson, 1984)
PHRAGMIPEDIUM WALLISII (Rchb. f.) Garay

(Dodson, C.H. & P.M. Dodson, 1982)
PHACMAPIJDLUM WARSCEWICZIANUM (Reich.) Gray

PLATE 1248

(Hemph. F., 1985)
Fig. 6.3. Approximate range limits of the three *Phragmipedium* sections. Question marks indicate areas where species may occur or have occurred. There is little reason to believe that populations between the non-related east Brazilian species were ever continuous since each is closely related to species to the immediate west or northwest. Although *Phragmipedium* may have had more suitable habitats in the lower latitudes than *Selenipedium*, the presumed greater seed dispersibility probably accounts for its relatively broad range.

(Ref.: Atwood, 1984)
Phragmipedium longifolium (Rchb. f. & Warsc.) Rolfe

Phragmipedium reticulatum (Rchb. f.) Garay
WE SAY IT AGAIN!
Grow the wonderful, colorful, and always pleasing
PAPHIOPEDELILUM!

Why? The season is now until May!

1. The plants require less heat.
2. They require less room. (We grow them pot to pot).
3. They are easier to grow, need less attention, and usually flower in 3" to 4" pots.
4. The flowers last longer — up to three months on the plant.
5. The flowers are also smog-resistant.
7. Great assortment.

Get the good stuff:
We offer a special assortment of:

Large dorsal sepals, spotted: Hybrids of:
- Pacific Ocean, Langley Pride, Chan’s Temple, Elegy
- Reds: Hybrids of:
  - Winston Churchill (these get awards) and Fire Girl
- Yellow and Greens: Hybrids of:
  - Kay Rinaman, Stoke Poges, Green Ruffles
- Pink Potential: Hybrids of:
  - charlesvorthli
- Brushed dorsal sepals: Hybrids of:
  - Sandra Mary, Fire Girl, some Winston Churchill, Harbor

Shipped:
Lots of 10 plants in-pot, assorted colors in bud, lovely foliage 12" to 20" span.
10 plants (4" pot size) in bud priced at $100.00
Plus packing and UPS second day air charge ........................................ $ 15.00
Total ............................................................ $115.00

Lots of 20 plants, shipped bare-root, all in bud, lovely plants, 12" to 20" span.
20 plants, good assortment, all in bud priced at $175.00
Plus packing and UPS second day air charge ........................................ $ 7.50
Total ............................................................ $182.50

Lots of 100 plants, shipped bare-root, all in bud, multigrowths, fine assortment.
100 plants, in bud or in flower priced at $750.00
Plus packing and UPS second day air charge ........................................ $ 17.50
Total ............................................................ $767.50

Our NEW PAPHIOPEDELILUM SPECIES LIST now has on it:
- BARBIGERUM .............. $20.00 each
- HANANENSE .............. $25.00 each
- PHRAGMIPEDIUM BESSEAE ........................................ $350.00 each & up

COME SEE THEM IN FLOWER. UPS CHARGES WILL BE BILLED AT COST

FOR YOUR CONVENIENCE: Use our out-of-state toll-free number — 1-800-235-4139. TERMS: Net cash with order — California residents, please add 6% sales tax. We also accept Visa and MasterCard. For orders outside the continental U.S.A., please add $20.00 for required export documents.

The Orchid House
1699 SAGE AVENUE, LOS ANGELES, CALIFORNIA 93402
(805) 528-1417 or 1-800-235-4139

Die Orchidee, 39(1), 1988
ZUM RARE BIRDS FLU INTO MY CUCKOO’S NEST . . .

ALL . . . RARE . . . PAPHIOPELIDUM AND PHRAGMPIEDUM SPECIES . . .

Paphiopedilum Dayanum, tall, triangular dorsal sepal . . . white, lined in green . . . petals lightly spotted, white, lined in tan and tipped in pink . . . pouch a glossy, hard maroon-brown . . . $225.00

Paphiopedilum Volchitnianum, totally rare, dorsal sepal triangular, white with lime green at the base . . . petals green, expanding at the tips into bright pinkish red . . . pouch brown, flowing to green . . . $220.00

Paphiopedilum Southerncalabareum, dorsal sepal pure white, lined in green . . . petals greenish, infused with pink . . . pouch pure lime green . . . rare . . . $490.00

Paphiopedilum Wentworthianum, (plantlets) dorsal sepal a soft combination of greens and rose . . . petals an almost brilliant purplish red . . . $175.00

Paphiopedilum Radbatum subs, nigrescens, hailing from Borneo, this is the “dark” form of Paph. Radbatum. This is not the common form from Thailand . . . $40.00

Plus . . . two really rare phalaenopsis . . .

Paphiopedilum Vitationum, dorsal sepal quite tall, with longish petals and a slightly distended pouch, colors green on tanish background . . . $40.00

Phragmipedium Besserae, this is the rare reddish form from Ecuador . . . and . . . you’ve seen this priced in the upper hundreds . . . our price . . . only, only, only, only, only . . . $140.00 (This is not subject to any discounts).

Now . . . to the discounts, purchase $500.00 or more . . . take 10% off. Purchase $1000.00 or more . . . take 20% off. Purchase $1,600.00 or more and take a whopping 30% off our listed retail prices.

Please note: All of the above listed species are imported, flowering-size plants.

Advance features for sale next month: Two cracked flasks of cotton and three sales of sterilized cotton.

Please add $10.00 (Hawaii, add $30.00) total for shipping, handling and airmail postage for any of the above selections. California residents, please include 6.5% sales tax. Bare-root only.

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Malibu, California 90265
Ph. (818) 707-3410

Please note: Ranges open by appointment only.

Paphiopedilum & Phragmpedium

BLOOMING-SIZE

Very large plants
Paph. parishii var. gigantea $15.00
Paph. insigne var. sonderose $21.00
Paph. concolor $6.95

This month’s special: Phrag. besserae $125.00

Shipped in pot only

No dealer orders accepted: Limit 6 per species
Please add $8.00 for bare-root shipping and packing 2nd day air UPS — $15.00 for shipping 1 day air UPS.

Topper Orchid Ranch
Route 19, Box 529, Lexington, NC 27292
(704) 352-5511

All orders must include your telephone number.
NC residents, add 5% sales tax.
No charges or COD.


Cattleya, neueste Meristemsorten:

<table>
<thead>
<tr>
<th>Sorte</th>
<th>Preis</th>
<th>Zustand</th>
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<tbody>
<tr>
<td>Blc. Segunda Valsacra 'Carmencita'</td>
<td>35,00 DM</td>
<td>x 4</td>
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<tr>
<td>Blc. Hazel Boyd 'Sunset' AM/AOS</td>
<td>40,00 DM</td>
<td>x 9</td>
</tr>
<tr>
<td>C. Irene Holguin 'Sweet Spring' AM/AOS</td>
<td>35,00 DM</td>
<td>x 7</td>
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<tr>
<td>Bro. sangriana var. allea Dream City AM</td>
<td>70,00 DM</td>
<td>x 2</td>
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<tr>
<td>Lc. Gila Wilderness 'Red Flare' HCC/AOS</td>
<td>35,00 DM</td>
<td>x 5</td>
</tr>
<tr>
<td>Blc. Brando 'Lea' AM/AOS</td>
<td>45,00 DM</td>
<td>x 8</td>
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<tr>
<td>Blc. Keith Roth 'Excelsior' AM/AOS</td>
<td>45,00 DM</td>
<td>x 6</td>
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<tr>
<td>Blc. Toshi Aoki 'Blumeninsel' AM</td>
<td>30,00 DM</td>
<td>x 6</td>
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<tr>
<td>Blc. Amang 'Orchidgale' x</td>
<td>45,00 DM</td>
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<tr>
<td>Blc. Kelly 'Lea' x</td>
<td>40,00 DM</td>
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<tr>
<td>Blc. Jamaica Red 'Lana' x</td>
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Sonderpreise Dendrobium:

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<tbody>
<tr>
<td>unicum</td>
<td>7,00 bis 14,00 DM</td>
</tr>
<tr>
<td>trigonopus</td>
<td>7,00 bis 15,00 DM</td>
</tr>
<tr>
<td>manganacetum</td>
<td>8,00 DM</td>
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<tr>
<td>bellatulum</td>
<td>8,00 DM</td>
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<tr>
<td>panshi</td>
<td>10,00 DM</td>
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<td>jenkinsii</td>
<td>10,00 DM</td>
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<tr>
<td>lodigessi</td>
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<tr>
<td>aprodite</td>
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<td>dracoon</td>
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<tr>
<td>crepidiulatum</td>
<td>12,00 DM</td>
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<tr>
<td>scabriulatum</td>
<td>10,00 DM</td>
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<tr>
<td>falconeris (stark)</td>
<td>16,00 DM</td>
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<tr>
<td>forstenbergianum</td>
<td>10,00 DM</td>
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<tr>
<td>amethystoglossum</td>
<td>16,00 DM</td>
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Sonderpreise Masdevallia (Seltenheiten):

<table>
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<tr>
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<tbody>
<tr>
<td>exaltata</td>
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</tr>
<tr>
<td>strobesii</td>
<td>30,00 bis 45,00 DM</td>
</tr>
<tr>
<td>urosalpins</td>
<td>40,00 bis 60,00 DM</td>
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<tr>
<td>prodigiosa</td>
<td>30,00 DM</td>
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<tr>
<td>lamprophytta</td>
<td>60,00 DM</td>
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<tr>
<td>wellischii</td>
<td>60,00 bis 180,00 DM</td>
</tr>
<tr>
<td>davisi</td>
<td>40,00 bis 60,00 DM</td>
</tr>
<tr>
<td>velvichiana</td>
<td>25,00 bis 35,00 DM</td>
</tr>
<tr>
<td>ayabacana</td>
<td>40,00 DM</td>
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<tr>
<td>Dracula sima</td>
<td>50,00 DM</td>
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Sonderpreise Oncidium:

<table>
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<th>Sorte</th>
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</thead>
<tbody>
<tr>
<td>Vanagea Hybriden, Meristemsorten:</td>
<td></td>
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<tr>
<td>fast blühen bis blühstark</td>
<td></td>
</tr>
<tr>
<td>Onc. Booth AM</td>
<td></td>
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<tr>
<td>Onc. Golden Louis 'Hogstburg' AM</td>
<td></td>
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<tr>
<td>Onc. Golden Sunset 'Fumi' AM</td>
<td></td>
</tr>
<tr>
<td>Onc. Golden Sunset 'Kim' AM</td>
<td></td>
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<tr>
<td>Onc. Mudas AM</td>
<td></td>
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<tr>
<td>Onc. Puff AM</td>
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<tr>
<td>Onc. Robelfeld 'Hakalau' AM</td>
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<tr>
<td>Onc. Robelfeld 'Bagasaki' AM</td>
<td></td>
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<tr>
<td>je Pfanze</td>
<td>12,00 DM</td>
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<tr>
<td>5 Stück</td>
<td>50,00 DM</td>
</tr>
</tbody>
</table>

Mindestauftrag 80,— DM, Ausland 150,— DM. Verpackung ist kostenfrei. Portoberechnung wie vorauslagt. Kein Nachahmeverpress, Besuche bitte vorher füllen anmelden!

Die Orchidee, 39(1), 1988
Guided by Lee Moore to collect rare species of orchids, bromeliads, and other tropical plants in the Amazon Jungles. Monthly trips to different areas. Write or call for information and itineraries. Please specify your available travel time. Private and personalized expeditions organized for groups upon request.


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**LEONA BEE'S ORCHID ADVENTURES '85!**

Join our "PANAMA SPECIAL" Feb. 27-Mar. 7 to collect in the wild and newly opened lush areas of the country. $1,449 (Round-trip & return) *The Miami Orchid Show will open the evening.

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BERGSTROM ORCHIDS
SPECIALS FOR THE MONTH OF JULY 1988

As has been my practice lately, I will open with my "MIXED BAG." Please remember that these plants are my choice. I always give three different species of whatever I have on hand (or too much of). This month it is URIDOPSIS, RICHARDSONIA, and GENDERTHEIYA. I will ship you THREE SPECIES FOR ONLY $15.00 EACH.

In addition, I will ship you ONE OTHER SPECIES FOR $20.00. Please state in your orders whether you can grow the cool types.

Paphiopedilum edulis var. madidens, The monarch of the jungles. The largest of the Paphiopedilum caudatum series, with petals up to 38 inches long. At Bergstrom Orchids we carry a large selection of laelias, enclavias, and Oncidiums with fresh plants coming in from the Americas all the time. Send for our free brochure. We mail order all in the lower 48 States and air mail plants to one hundred States.

If we don't have the species you want, we can get it. Nearly all our plants are priced from $6.00 to $15.00.

Bergstrom Orchids Nursery, 494 Camino Manzanas
Thousand Oaks, California 91360 (805) 495-1792

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What you can buy, after you pay... here they are...

six... outstanding Paphiopedilum species... plus...?
Paphiopedilum giganteum var. madidens. The monarch of the jungles. The largest of the Paphiopedilum caudatum series, with petals up to 38 inches long. For the love of beauty... only $15.00.
Paphiopedilum candidum var. madidens, Both shade and sun. Slightly smaller than giganteum but with more petals. For the love of beauty... only $12.50.
Paphiopedilum rothschildianum. Closer allied to bensoniana than any other species. For the love of beauty... only $17.50.
Paphiopedilum rothschildianum. Just the reverse of cool greys you can imagine. Flowers namelessly, less. For the love of beauty... only $22.50.
Paphiopedilum bensoniana. Growers favorite. For the love of beauty... only $9.00.
Paphiopedilum x rothschildianum. By far the largest of the genus. For the love of beauty... only $8.00.
Paphiopedilum x rothschildianum. The newly discovered species from Peru. Greenish dorsal sepals with slightly twisted reddish petals... only $12.50.

Plus... other... really... good... stuff...
Paphiopedilum bennettii, Newly discovered. Huge plants. Big stems holding up ten or more very large, magnificent flowers. Somewhat between rothschildianum and stewartii in appearance. For the love of beauty... only $12.50.
Paphiopedilum richardsonii. From Peru. A new species. Dorsal sepals cupped forward slightly, grea at center, blending to deep blackish purple at edges. Petals totally produced, with huge black base at top, blending to soft pink at the tips. Peach soft greenish tan... only $12.50.
Paphiopedilum schizanthus. Another new... looks somewhere between Pap. venustum and Pap. superbus. Outstanding, and only... only $15.00.
Paphiopedilum lowii. Elegant form. Loyally is usually from both Bowles and Sumatra. Has got to be a craze. Only ten plants available... only $20.00.

New species. Someonse Discarded as being close to lowii but with a white dorsal sepal. Sounds interesting. And the price is right. Only... only $20.00.

Special deals... Buy any different six and take 15% off the listed retail prices... Buy seven or more and take a confusing 22% off the listed prices.

All the above-listed species are mature, flowering-size, imported plants. Please state in your orders whether you want shade or sun. Shade is usually from both Bowles and Sumatra. Has got to be a craze. Only ten plants available...

R. J. Rand Orchids
421 Westlake Blvd.
MAlibu, California 90265
Ph. (818) 797-3410

Please add $10.00 (Hawaii add $20.00) total for shipping, handling and airmail postage for any of the above selections. California residents please include 6.5% sales tax.

Bare-root only. We do not have lists. We do not ship out of the U.S. Sorry.

PLEASE NOTE: Range open by appointment only.

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Here goes our second offering for the ORCHID DIGEST. I hope that you might find some interesting and worthy species herein. I will be starting off with a mighty expensive item but, as you see, not all our plants are in the upper strata price bracket.

PHRAGMIPEDIUM BESSEAE, ECUADOR — Read the article and you have all that you need to know about this one. They do not appear to be hard to grow; just pay for. I have about 15 of them to sell at prices from $300 to $500 depending on amount of leads, etc. I hope that I still have an ample supply at the time that this comes to press.

BARKERIA PALMERI AND SCANDENS, MEXICO — Both of these are mighty handsome and worthy of a place in any greenhouse. I simply hang them by monofilament fishing line and get very good results. The palmer can produce an absolutely extraordinary abundance of blooms. Both flowers are of the color of pale pink to lilac. They do not much care for water in the winter ........... $20 each

BRASSAVOLA FLAGELLARIS, BRAZIL — Handsome rat-tail type growth, long and elegant. Blooms are plentiful and elegant. Cartreuse and white with an emerald green spot in the throat. A bargain at ........................................... $8

BRASSAVOLA CUCULLATA, MEXICO — Another of the rats-tails, this time with a pure white color. The bloom is exquisite. Sepals and petals are pendulous and somewhat spidery. With a large plant this species in bloom is a thing to behold...................... $10

ONCIDIUM SPILOPTERUM, BRAZIL — The very nicest of the yellow Oncidiums. The center is a brilliant jewel of red reminiscent of a ruby ................................................. $15

NANODES MEDUSAEC, ECUADOR — I hope that I still have some of these left by the time that you get your bulletin. These are certainly the most outstanding of all the orchid genera. Fairly large purple bloom on a pendant growth that looks more like a centipede than a plant .................................................. $30

PHRAGMIPEDIUM SARGENTIANUM, BRAZIL — One of the more unusual of the family. You do not tend to think of Brazil when you think of Phrags. Another, satsum, also originates from Brazil. It is even harder to come by than sargentiarium. This blooms fairly tall with nice, rich colors of green, brown, and a kind of purple. Easy to grow (for me anyhow) ....................... $15

ORCHIDS FROM THE AMERICAS ARE OUR SPECIALTY

At Bergstrom Orchids we carry a large selection of Laelias, Encyclias and Oncidiums with fresh plants coming in from the Americas all the time from Mexico, Central America and South America.

Note that most plants are sent bare-root. Specials are good for three months from the time you receive your Digest. Supply is limited in some cases but most can be supplied later if sold out.

BERGSTROM ORCHIDS

Predominantly Species

GREENHOUSE HOURS: BILL BERGSTROM

9:00 to DARK (Owner)

7 DAYS A WEEK (805) 495-1792

494 Camino Manzanas Thousand Oaks, Ca. 91360

SEND FOR OUR FREE BROCHURE. WE MAIL ALL OVER THE UNITED STATES AT $6.00 TOTAL. ONE PLANT OR ONE HUNDRED.

IF WE DON'T HAVE THE SPECIES YOU WANT, WE CAN GET IT. NEARLY ALL OUR PLANTS ARE PRICED FROM $8.00 TO $15.00.

Cold weather can delay shipping. SORRY no overseas delivery is possible at this time.

Orch. Dig., Jan.-Feb.-Mar., 1988
This document discusses the identification of orchids and their contribution to illegal trade. It mentions the CITES (Convention on International Trade in Endangered Species of Wild Fauna and Flora) and the difficulties in identifying orchids correctly. The document emphasizes the need for accurate identification and reporting to prevent illegal trade.
Chrysipodium caudatum. Narrowly butter epiphytic, terrestrial or lithophytic. At the time of the period 1760 to 1775 it was common in the Department of San Juan, Trujillo, and Copacabana along the roadways where it is now virtually extinct. It must be searched for on rocky hillside or in virgin forests which are now very scarce. It has been collected very locally for export. It is such a large and showy plant that the inhabitants living in the jungle grow it in large tin cans in the front of their houses. Its common name is the "Queen's Clipper." Many hundreds have been brought to Lima in flower by peruvian tourists, but unfortunately they soon die due to the fact that Lima's soil and climate is alkaline. This species is now very difficult to find in essential numbers i.e. 15 to 25 whereas before it was easy to find 100 to 200 from a small locality covering 10 to 20 hectares. This species is endangered quite seriously despite its wide habitat distribution. The road between Copacabana and San Fernando in the Department of San Juan is now rapidly steep slopes where it was easy to find. Chrysipodium caudatum this cultivar has been depleted. The name for Don Basilio 1765 to 1775 has been collected intensively, trees cut, and the underbrush burned. Habitat destruction coupled with harvest. Highly selective collection has reduced the normal population greatly, endangering this species. A small collection exists along the 15 km road from San Fernando to Copacabana then up to 2000 m towards Huaycay. The next time during the 1911 and 1912 season to Copacabana and Millinor to the Lake Titicaca, cleared of all virgin to date. Hundreds
Phragmipedium 'Carcass' is confused by many with Phragmipedium coronarium, which is not common in Peru, but Phragmipedium 'Carcass' was very common. In 1938 it was reported that at least 10,000 plants of Phragmipedium 'Carcass' were systematically collected and exported in only a few shipments by one person. This species normally grows along swift streams or in exposed cays where water splashes on the rock system. It branches frequently and forms nlds of 20 to 50 mature flowering stems. The collector contracted 'Carcass' in the Department of Cayambe to make a large collection of 10,000 immature plants of Phragmipedium 'Carcass'. The collector was the equivalent of 65,000 per mature plant. This species, due to its small size and prolific growth habit, has vanished for extinction by the great demand for this compact epiphyte. Phragmipedium 'Carcass' is quite rare in Peru and is recognized by its large plant size and distinctive stamina.

Phragmipedium caespitosum and P. reticulatum are both species which do not have large populations and therefore are much more subject to imminent danger of extinction.

There is every indication that the genus Phragmipedium is seriously endangered as long as Peru does nothing to protect their
Ms Lydia Klöss
Zoo Wuppertal
Hubertusallee 30
5600 Wuppertal 1
Fed. Rep. of Germany

28 November 1988

Dear Ms Klöss,

Thank you for your letter of 8 November about Phragmipedium.

The trade in species of Phragmipedium has undoubtedly increased dramatically in the past few years and I have seen large importations both in California and Europe of jungle-collected plants.

So far as I know two species are particularly threatened by this trade. These are P. extaminodii from Mexico and P. besseae from N. Peru and Ecuador. I have been told by reliable sources that every known colony of the latter has been stripped by collectors such is the demand for it.

I would suggest that you try and get first-hand information of P. besseae from Dr C Dodson, Casilla, Sucursal, Quito, Ecuador, and Mr Stig Dalstrom, Gylleforget 20, 78132, Borlange, Sweden, both of whom know this species in the wild. For P. extaminodii you should contact Sr. Ing. Eric Hagsater, Apartado Postal 53-123, 11320 Mexico D.F., Mexico.

Dr Dodson will also be able to give you information on other Andean species.

I would luck to wish you good luck with your project.

Yours sincerely,

Phillip Cribb

dmc
Por este conducto me permito comunicarle que recibimos una carta de Lydia Klos, de la Sociedad Zoológica de Frankfurt, con fecha 4 de octubre del año en curso, en la cual nos pide información de Phragminedium spp, sobre su estado poblacional; distribución histórica y actual, alteraciones o destrucción de hábitat, uso y valor comercial y su tráfico legal e ilegal.

La razón del interés por esta información se debe a que desean proponer la transferencia de este género de orquídeas del Apéndice II al Apéndice I de CITES.

Por lo anterior, anexo le envío información proporcionada por la Asociación Mexicana de Orquideología, A.C., sobre dicho género en México. Así mismo, nos unimos a la opinión de dicha Asociación en el sentido de que las especies del género mencionado no sean transferidas al Apéndice I del CITES, en virtud de que dichas especies no son comercializadas y están próximos a realizar diversos estudios entre los que se pretende su propagación.

Cabe señalar que nos ha extrañado que una Sociedad Zoológica, nos solicite información sobre especies vegetales, es por ello que si usted considera prudente, se remita la misma a la siguiente dirección:

LYDIA KLOS
ZOO WUPPERTAL
HUBERTUSALLE 30
5600 WUPPERTAL 1
FEDERAL REPUBLIC OF GERMANY

Sin otro particular, le reitero mi consideración más distinguida.

SUFRAGIO EFECTIVO. NO REELECCION. LA DIRECTORA GENERAL.

DRA. GRACIELA DE LA GARZA GARCÍA
Dear Ms. Klös:

Thank you for your letter of October 25th, which just reached me. I had already had notice of your interest through our Ministry of Ecology.

There are two species of *Phragmitedium* in Mexico; *P. exstaminodium* Castaño, Hágsater & Aguirre, and a new species which will soon be published and related to *P. schlimii* and *P. besseae*, which we recently discovered in southern Mexico. I enclose a reprint of the original description of the first species, which was confused in earlier publications with *P. caudatum* Lindl. which does not occur in Mexico or Central America.

Both Mexican species are very rare, known only from a few specimens and one or two localities. We have an ongoing conservation project for *P. exstaminodium* partly funded by WWF-US to try and locate viable populations and see the possibility of their conservation. It is most probably also found in recently decreed protected areas. It is also our intention to promote its artificial propagation. As to the new species it is known from one small colony only and several plants have been distributed to reputed grower-propagators to try and reproduce it and through propagated plants introduce it into cultivation. The type locality is kept secret so as to protect it and is found in an area which has been proposed as a natural reserve under the MAB (Man and the Biosphere) programme, in essence, the natural habitat is protected.

Due to the scarcity of both species, neither is in commerce, although about 100 plants of *P. exstaminodium* were once introduced as *P. caudatum* into the United States, about 15 years ago.

Regarding the idea of putting the whole genus in Appendix I of CITES, we do not agree with such a strategy, because we believe that Appendix I in practice makes it impossible to promote the propagation of such species in tropical countries, which is a way to insure its conservation by diminishing the demand for wild collected plants, and promote local income. Thus, although it is not the intention of CITES, practically, due to the way CITES is applied in the USA, it would be in practice very difficult to export propagated plants to the main markets, and thus nobody would be interested in propagating it in the countries of origin, and only illegally collected wild plants will be smuggled into the United States. This is especially true for such rare species as ours. You would in fact be putting a very high price on each plant, and they are so easily smuggled, that it would be impossible to control.
As an additional comment, I may add that I just returned from Ecuador, where large amounts of *P. besseae* were sold. Though originally thought to be very rare, it has turned out to be a common species found along the eastern Andes from Perú to Colombia, usually in inaccessible places which can be neither burned nor used for agriculture, and thus the natural habitat seems very safe, and although some localities have been completely depleted of their plants, many other localities are safe. In addition I was able to observe how Father Angel Andreetta in Cuenca cultivates and propagates the species easily with new growths produced from old stolons. Thus, although the species is now extinct in the type locality in Perú, it seems in no serious danger of extinction in the wild. Its propagation by vegetative division in the Andean countries seems a very worthwhile commercial project for export.

I would strongly recommend you follow the Tokyo findings of the Conservation Committee of the IOC (International Orchid Conference) and the Orchid Specialist Group of the IUCN, in relation to adding more species to Appendix I of CITES. I strongly believe it would be counterproductive.

In addition, please bear in mind the orchids are not animals. In the case of animals, you generally need two consenting adults to get one or a few offspring, whereas you may produce very many new individuals from orchids by various means: vegetative division, artificial pollination and production from seed in controlled conditions, and meristem tissue culture (in many, but not all species). It is very unfortunate that CITES, as originally conceived for animals has been applied to the plant kingdom as such, when plants behave in a very different way, and orchids in particular.

If you need any more information, please do not hesitate to write, this is a subject in which I have taken much interest for many years, as a scientist with no commercial interests.

Looking forward to hear from you, I remain,

Sincerely,

[Signature]

Eric Haggard
Herbarium Director

ccp. Joyce Stewart, OSG-IUCN
Philip Cribb, Kew
October 17, 1988

Lydia Klos
Zoo Wuppertal
Hubertusallee 30
5600 Wuppertal 1
Federal Republic of Germany

Dear Ms. Klos,

Thank you for your letter dated 22nd September, 1988. There is no available information at our disposal concerning the status of the American slipper orchids in order to give an objective view on your proposal.

We support your representation on the matter.

Yours sincerely,

OSCAR ROSADO
Ag. Chief Forest Officer
PARTIAL SUMMARY OF PERUVIAN ORCHID EXPORTS IN 1987 TO THE U.S.A.

NUMBER OF EXPORTERS------------------------------------------6

1. II2 RESECTACIONES E.I.R.L. (TWO SHIPMENTS)--------17%
2. GELDERT ISERN BULILENIA (ONE SHIPMENT OF 2000)
   CATTLEYA VIOLACEAS)----------------------------------26%  
3. JOSE MEZA TORRES--(ONE SHIPMENT)---------------------6%
4. MANUEL ARIAS S. (TEN SHIPMENTS)----------------------41%
5. CIA. EL NUIGEDOR E.I.R.L. (ONE SHIPMENT)----------------5%
6. SOUTHAMERICAN PLANTS S.A.-----------------------------2%

Sr. Manuel Arias S. has openly admitted that he shipped from Peru plants of Phragmipedium besseae to J.L. Rand Orchids in the U.S.A. This species is very nearly extinct in Peru due to excessive depredation in the past 6 years, and we alerted La Dirección General Forestal y de Fauna to this situation with no acknowledgement whatever from Ing. Marco Romero P., Director General.

Our study of the exports shows that there is no competent Scientific Authority within Forestal to identify the species to be exported. More important is the fact that nothing is known by the authorities about the ecological effect on the population from which the orchids were collected and whether or not the removal will cause endangerment to the survival of the species. This rather defeats the whole purpose of the Convention. These collections are not in any way facilitated by logging operations. They are highly selective.

La Dirección Forestal General y de Fauna has stated they are primarily interested in the fact that orchid exports produce divisas for the country. In order to maintain an appearance of legality, they request that each solicited be accompanied by 1) a Declaración Jurado del Valor of the shipment, 2) a certificate of plant identity, which must simply be signed by any Biologist. In the case of legitimate scientists with full credentials wishing to export plants, they must submit their plant or animal material for identification by competent personnel of the Museo de Historia Natural 'Javier Prado' and agree to leave specimens with the museum or send them back to Peru after the research has been completed.

Commercial collectors are not required to leave any specimens with the Peruvian institutions, and send out the great majority of their jungle collected specimens without flowers. We take note of Forestry's great interest to produce divisas for PERU. We offer the following information collected from various sources such as The American Orchid Society Bulletin and copies of the 1987 CITES Export Permits from Peru.

Orchid Plants Value declared to Forestal Commercial Value
1987 (nearly 90%) U.S. 1,50 ea. Total U.S.A.
U.S. 10,000.00 U.S. 123,301.00

We recommend that the Ministerios of Comercio, Economía y Finanzas be consulted about the method used by the Ministerio of Agricultura to insure the declaration U.S. dollars produced by the actual sales of the orchids. Where are the invoices?
13 October, 1988

Herr Rainer Blanke
Bundesamt fur Ernahrung und Forstwirtschaft
Adickesallee 40
D-6000 Frankfurt am Main 1
FEDERAL REPUBLIC OF GERMANY

Dear Herr Blanke:

I understand from Ger van Vliet that Germany is considering initiating a proposal to transfer the orchid genus Phragmipedium to Appendix I. I wish to provide the following information in support of your efforts.

I enclose photocopies of the U.S. Annual Report data showing U.S. imports of the genus in 1985 and 1986. The latter is from the preliminary computer printout rather than the final report, but I expect that it is accurate.

I enclose further a computer printout showing U.S. imports of the genus from Peru only in 1987. I compiled this record directly from the CITES documents on file with the Office of Management Authority, so it is unofficial.

Environmental activists in Peru have complained to me frequently about the extent of trade in wild-collected orchids from that country. I have written to them today, urging them to compile all information available to them about Phragmipedium trade and the status of various species in the wild. I will forward that information to you as soon as it becomes available.

In the meantime, I will try to find time in November or December to update my own files on Phragmipedium imports (that is, imports from Peru in 1988; imports from other countries in 1987 and 1988). I will forward this information to you as soon as possible.

I will also explore other sources of expertise on the genus. As you know, many orchid experts are hostile to CITES, so it may be difficult to find people willing to cooperate.
I regret that you will not be at the London meeting. However, I promise full support in this and other endeavors. If you wish any information about U.S. dealers trading in either Phragmipedium or Paphiopedilum, please let me know.

Sincerely,

Faith Thompson Campbell, Ph.D.
Mr. Dave Bennett  
Asociacion de Ecologia y Conservacion  
Vanderghen 560-2A  
Lima 27, Peru

Dear Mr. Bennett:

I was given your name by Ms. Eva Eckenrode at TRAFFIC(USA) as you may be interested in my comments on cultivation of various Peruvian orchid species in the USA and also their importation into this country.

I am an amateur orchid grower specializing in orchid species that grow at higher elevations from around the world. I also have what might be described as an intense interest in tropical forest conservation and ecologically sound forest management alternatives.

Some projects I am considering are: 1. propagation from seed and reintroduction of various rare montaine orchid species into protected habitats in their countries of origin. I would be willing to donate seedlings for this purpose. 2. maintaining a cryogenic seed bank of as many orchid species as possible in conjunction with the American Orchid Society (if not already being done). 3. conducting experiments to determine the long term viability of orchid seed in cryogenic storage and methods to enhance that viability.

I have examined the documents received summarizing Peruvian orchid trade for 1987. My comments are as follows. Phrag. besseae is still being exported from Peru, a company in the US (J and L orchids) received a shipment this month from an exporter in Peru possibly identified as Phrag. boisserianum. The following species were exported in far greater numbers than listed or were exported and completely omitted from the list; Masdevallia lamprotyria, M. dura, M.pumila, M.ariasii, M. aphanes, M.ensata, M. deformis, M. weberbaueri, M.mendosae, M.tubulosa var. syringiodes, M. kuhnnorum, etc. Species listed in the documents as exported from Peru are not known to exist in that country, one that most notably stands out is Nanodes medusae from Ecuador. Prices listed for value of plants in US$ are on average 25% undervalued.

Please send any information about ways that I can help your efforts to the above address. I am also planning on working with the American Orchid Society on the above issues soon.

Thank you for your time and consideration.

Sincerely,  
Mark Wizeman