## IX. TROPICAL ORCHIDS AS AN ENDANGERED PLANT GROUP\*

"A dramatic offering of <u>three</u> new Paphiopedilum species from the remote jungles of central Viet Nam (Annam) ... India ... Philippines.

VIET NAM (ANNAM): The story of how our collectors managed to locate, collect and transport this rare species from the ravaged jungles of Viet Nam is still cloaked in total secrecy ... Paphiopedilum anamensis (sic), well-established mature jungle plant \$ 35.00.

INDIA: Collected in Nepal ... this species has the identical leaf pattern of the very rare Paphiopedilum wardii (list price \$ 500.00) and we feel that this could be a 'chance' rediscovery of this lost species ... \$ 35.00.

PHILIPPINES: Collected on Guimaras Island, this is the first known collection from this remote Philippine area ... Paphiopedilum guimarasenses, partially established jungle plant \$ 35.00."

These are excerpts from a full-page advertisement of R.J. Rands Orchids, 15322 Mulholland Drive, Los Angeles, California 90024, in the American Orchid Society Bulletin p. 551 (June 1975). A dramatic offering indeed ... especially for the orchids themselves!

Tropical orchids entered western European horticulture comparatively late, owing to transportation risks and unability to grow plants from seed. About 1800, Kew Gardens had a dozen species; another 12 were added in the next 15 years. In 1815-1840 a total of 53 species were added. Thereafter accretion went faster, when Wardian cases - a kind of mini-greenhouses which protected the plants from salt spray aboard ship - had been invented. Nurserymen - especially Cattley is to be named - grew more expert and aroused interest with the public. Before long, a 'gold rush' on orchids was on, botanical gardens, firms, and amateurs employing collectors in the tropics. In 1836 Cuming regularly sent orchids from the Philippines; in 1843 Thomas Lobb entered the service of Messrs. Veitch and till 1860 collected in many places in Malesia. Not only for novelties was the hunt; in 1870 Wallis was sent to the Philippines to ship Phalaenopsis in quantity. The profession held risks: eight collectors, among whom Klabach in Mexico and Wallis in Ecuador, lost their life in the service of Sander's alone. Collections, too, often perished when a collector died or became ill, also in shipwreck or neglect on board.

<sup>\*\*</sup> Abridged English version of a paper in Panda Nieuws 11, no. 12 (1975) 115-120, 5 phot., the monthly of WWF Netherlands Appeal.

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European residents in the tropics also took interest, and sent native tree climbers into the forest, who took boatfuls of orchids; the desired species were kept and the rest thrown away. L. Coomans de Ruiter in his book Uit Borneo's Wonderwereld (1937) wrote that Gunung Kelam in West Borneo, about 1900 famous for its orchid flora, by 1935 was virtually depleted of orchids, the small-flowered species included. A Belgian firm ordered in Pontianak thousands of Paphiopedilum lawrenceanum. Local collectors who did not know this species, brought 3600 P. hookeri which were refused. An effort was made to sell them in the local market, but 3000 plants had to be discarded. Stations of other species in demand were tracked down and completely plundered. In 1929 Coomans de Ruiter proposed G. Kelam as an orchid reserve, but a few traders got wind of this and quickly organized a large collecting raid. The harvest arrived in such poor condition that it sold for a mere 20 dollars. Thereupon, Coomans de Ruiter withdrew his proposal, "because nearly all orchids are now extinct in that area."

Nowadays, at the Puncak Pass on the highway between Bogor and Bandung, not far from the Cibodas Nature Reserve, many stalls offer wild orchids for sale. A network of plant-exporters operates all over Indonesia. At Padang, I visited a 'nursery' which was wholly stocked with wild orchids from the nearby forests. The owner explained that this was much more profitable than propagating the plants himself. When he received an order for species not in his region, he could have them from a colleague elsewhere. Not all his plants looked very healthy; species from the mountains he tried to keep at the coast. His list carried 200 names, priced from 1 to 100 dollars, all American currency since he did not sell in Indonesia for lack of profit. He would take orders for hundreds of plants, but then you had to give him some time.

Botanical gardens, nowadays, do not collect for sale anymore, but Bogor and Singapore, and perhaps others, grow orchids artificially and also do their best to instruct nurserymen in these techniques.

The danger of extinction is often underrated by people who think that nurseries in Western countries will grow enough plants for the market. Yet we have here the Dramatic Offering before us, and in fact many species have already disappeared from the wild. In Holland one grower proudly told me that one of his species was extinct in nature. Modern logging destroys huge tracts of primary forest, but commercial firms seldom take the opportunity to avail themselves during the logging operations of living plants, which are otherwise bound to perish.

When Coomans de Ruiter made his observations, there was no law yet in Indonesia to regulate orchid export; the Sarawak

one dates of 1929. There seems to be an ordinance now. But enforcement is a different matter. The Padang exporter told me that he never had any problems. Airlines contribute to the depletion in their own manner. For consignments of living orchids over 25 kg, the KLM charges but half its normal rate.

The parallels with threatened mammals, birds, and reptiles are only too clear, and the problems are identical. Protected species can be dispatched under the name of a common one; so bans must be imposed on whole groups of plants and animals. But once an international agreement is reached, like at the convention of Washington on trade in plants and animals of 1973 (which was signed by 57 countries), how can it be implemented against established commercial interest? Here again, conservation education will be peremptory.

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## TIME SCALE OF CONCERN. EVOLUTION OVER 8000 + YEARS

i	Period	Operator	<u>Objective</u>	Time_Scale
Wildlife	to 8000 B.C.	hunter- -gatherer	next meal	1 day
Domesticated plants	to 1850 A.D.	peasant farmer	next crop	1 year
	from 1850	plant breeder	next variety	10 years
	from 1900	crop evolutionist	to broaden the genetic base	100 years
Wildlife	to-day	genetical conserva- tionist	dynamic wildlife conservation	10,000 years
		politician	current pub- lic interest	

Sir Otto Frankel, in IUCN Bulletin n.s. 5 (Dec. 1974) 45.