AMENDMENTS TO APPENDICES I AND II OF THE CONVENTION

Other Proposals

A. PROPOSAL

Transfer of dwarf species of *Aloe* of Madagascar from Appendix II to Appendix I.

B. PROPONENT

Madagascar and Swiss Confederation.

C. SUPPORTING STATEMENT

1. Taxonomy

11. Class: Liliopsida (Monocotyledoneae)

12. Order: Liliales

13. Family: Liliaceae

14. Genus: *Aloe* L.

15. Species:

Group 1

A. haworthioides Baker (1887)
[incl var. *aurantiaca* H Perrier (1926)]
A. parvula Berger (1908)
A. bellatula Reynolds (1956)
A. albiflora Guillaumin (1940)
A. calcairophila Reynolds (1961)
A. descoingsii Reynolds (1958)
A. rauhii Reynolds (1963)
A. bakeri Scott Elliot (1891)
A. delphinensis Rauh (1990)
A. parallelifolia H Perrier (1926)
A. versicolor Guillaumin (1950)
A. alfredii Rauh (1990)

Group 2

A. compressa H Perrier (1926)
[incl var. *rugosquamosa* H Perrier (1926)]
[incl var. *schistophila* H Perrier (1926)]

Group 4

A. laeta Berger (1908)
[incl var. *maniensis* H Perrier (1926)]

New Species

A. fragilis Lavranos and Roosli (1994)

All the taxa of group 1 of Reynolds' taxonomic treatment (Reynolds, 1958) have been included in the proposal. Only 2 taxa, *A. perrieri* Reynolds (1956) and *A. boiteaui* Guillaumin

(1942), are excluded, since the taxonomic status of the first is dubious (synonym of *A. bellatula*?) and the second, a native of Fort Dauphin (south), has never been observed since. All the taxa of group 2 have been included. A single taxon of group 4 has been included. It is, however, very different from the other taxa of this group. A newly described species of dwarf Aloe has also been added to this list (*A. fragilis*).

16. Common Names:

17. Code Numbers:

2. Biological Data

21. Distribution: All these taxa are endemic to Madagascar. They are found primarily in the central, southern and southwestern regions of the country (see appendix). Their distribution area are generally very limited to a few inselbergs.

22. Population: While populations may be locally abundant, in most cases they include only a few dozen individuals.

23. Habitat: These taxa are usually found in inselbergs, generally of a granitic nature. They grow in among or close to the stems of herbaceous plants clinging to the rock, where they find the specific conditions required for their development. Unfortunately, increasing numbers of prairie fires are attacking the edges of these refuges, burning and eventually killing the mats of herbaceous plants. As the dead roots loosen their grip on the rock, rain loosens the islets of vegetation, which slide down to the base of the mountain, carrying with them all the companion plants from these mini-biotopes, particularly the dwarf Aloes.

Moreover, because of their extreme fragility collecting is very difficult. They are often tightly intertwined and many specimens are destroyed when separating the individual specimens. Only seeds should be collected.

3. Trade Data

31. National Utilization: A number of species are found in local trade, including *A. haworthioides*, *A. parvula*, *A. compressa* and *A. calcairophila*.

These plants are collected in the wild and sometimes kept in nurseries prior to sale.

32. Legal International Trade: All plants exported from Madagascar are covered by the necessary CITES permits. Most exported plants are listed as wild.

33. Illegal Trade:

321. Wild Plants

A. haworthioides			
Year	1990	1991	1992
Number (MG)	--	--	05
Number (AR)	--	14	05
Destination	France, South Africa, Germany, Japan		

A. parvula			
Year	1990	1991	1992
Number (MG, AR)	20	10	07
Destination	Germany, France, Switzerland, Japan		
A. calcairophila			
Year	1990	1991	1992
Number (MG)	10	12	60
Number (AR)	--	12	58
Destination	Germany, France, South Africa, Japan		
A. descoingsii			
Year	1990	1991	1992
Number (MG)	22	03	10
Number (AR)	--	07	10
Destination	France, South Africa, Japan, Switzerland, Reunion, US		
A. parallelifolia			
Year	1990	1991	1992
Number (MG, AR)	23	00	03
Destination	France, South Africa, Japan		
A. versicolor			
Year	1990	1991	1992
Number (MG, AR)	00	00	00
Destination	--		
A. compressa			
Year	1990	1991	1992
Number (MG)	26	10	05
Number (AR)	--	48	45
Destination	France, Switzerland, Japan		

A. laeta			
Year	1990	1991	1992
Number (MG, AR)	14	06	37
Destination	France, Switzerland, Japan, Germany		
A. bakeri			
Year	1990	1991	1992
Number (AR)	--	--	04
Destination	France, Switzerland		
A. rauhii			
Year	1990	1991	1992
Number (AR)	--	--	03
Destination	France, Switzerland		
A. bellatula			
Year	1990	1991	1992
Number (MG, AR)	--	--	05
Destination	France, Switzerland		

MG: oral communication, Madagascar
AR: annual report, Malagasy authorities

The following comments should be made with respect to the information from the annual reports of the Management Authority of Madagascar:

1. The number of exported plants appears rather low. However, this is only apparently true, since the population numbers are low as well!
2. Exported plants represent only the "tip of the iceberg" in terms of the numbers collected. A large proportion of the plants die even before they can be exported.
3. Exports of certain species show a definite increase in 1992: *A. laeta* (+185%) over the average for the previous two years, *A. calcairophila* (+545%). Their popularity may change rapidly. Certain species, including *A. bakeri*, *A. bellatula* or *A. rauhii*, must thus be protected "in advance".
4. These figures also indicate that, as soon as a new locality is discovered in the wild, it is immediately pillaged and the specimens exported.
5. The importing countries are generally the same: Germany, France, Japan, Switzerland, South Africa, and the United States. More specific information may be required for the protection of the species.
6. Certain species which, according to these data, have not been exported legally appear nonetheless to be available in certain countries. Some are probably exported under false names, a relatively easy task since all

the species in this group are very similar. This is particularly true of the recently described species *A. alfredii* (1990) and *A. delphinensis* (1990).

322. Artificially Propagated Plants: Plants can be artificially propagated by division or by seedlings. This is relatively easy. Some, however, are easier to propagate by seedlings (*A. parvula*, *A. descoingsii*), and others by division (*A. haworthioides*).

Moreover, because the leaves of these plants are fragile, wild specimens are better replaced by artificially propagated plants packed in suitable containers.

33. Illegal Trade: No illicit exports of the above taxa have been reported. However, certain plants may have been exported under other names because of the inadequate information available on these species.

34. Potential Trade Threats

341. Live Specimens: These small species are very attractive. Since the populations are very small, any collecting from the wild is detrimental. In addition, these plants are fragile and easily injured by division. When this occurs, they rarely survive.

Plants obtained by division require identical conditions in order to grow and in particular to reproduce. Artificial propagation is thus a slow and difficult process.

342. Parts and Derivatives: The collection of seeds in the wild is difficult. The plants must be watched closely if the collector is to be present at the proper time. Production is relatively low and collection is inadvisable. The growth of artificially propagated plants from seedlings is extremely slow.

Seeds of the species listed in Appendix II are not subject to CITES regulation.

4. Protection Status

41. National: Trade in wild plants listed in the appendices of CITES is prohibited. A forest decree (Ord 75-014) regulates collecting and trade. Artificially propagated plants are not subject to this restriction. However, it should be noted that most recognized horticulturists rarely comply with this law and collect wild plants for their nurseries without authorization. In the past, after a brief period in these establishments, which often bear little resemblance to horticultural centres, the plants were exported as "artificially propagated" with the support of the authorities. However, this no longer appears to be case: all exported Appendix II plants are believed to be wild. Monitoring of export quotas may, however, still be required.

42. International: The taxa have been listed in Appendix II since 1975.

43. Additional Protection Needs: Protected areas must be created for the protection of the rare populations of this species. It is vital and urgent that prairie fires be prevented around the inselbergs which, in some cases, shelter the single population of a species. Destruction of the vegetation on these hills represents a death sentence for the Aloes living there! In addition, since these inselbergs are generally of no economic or agricultural value, it should be relatively easy to define a management policy for those with the richest flora. At the same time, artificial propagation of the species should be encouraged to meet the primarily foreign demand.

5. Information on Similar Species

This group of species differs fairly substantially from the other *Aloes* of Madagascar or other regions, particularly South Africa.

6. Comments from Countries of Origin

This proposal is designed to discourage all collection from the wild. Even sustainable exploitation appears to be impossible (for the time being), given the very low numbers of the rare populations and the other threats weighing on these taxa.
A program of artificial propagation in the medium term, combined with possibly reintroductions or reinforcements of declining populations, is eminently desirable.

7. Additional Remarks

8. References

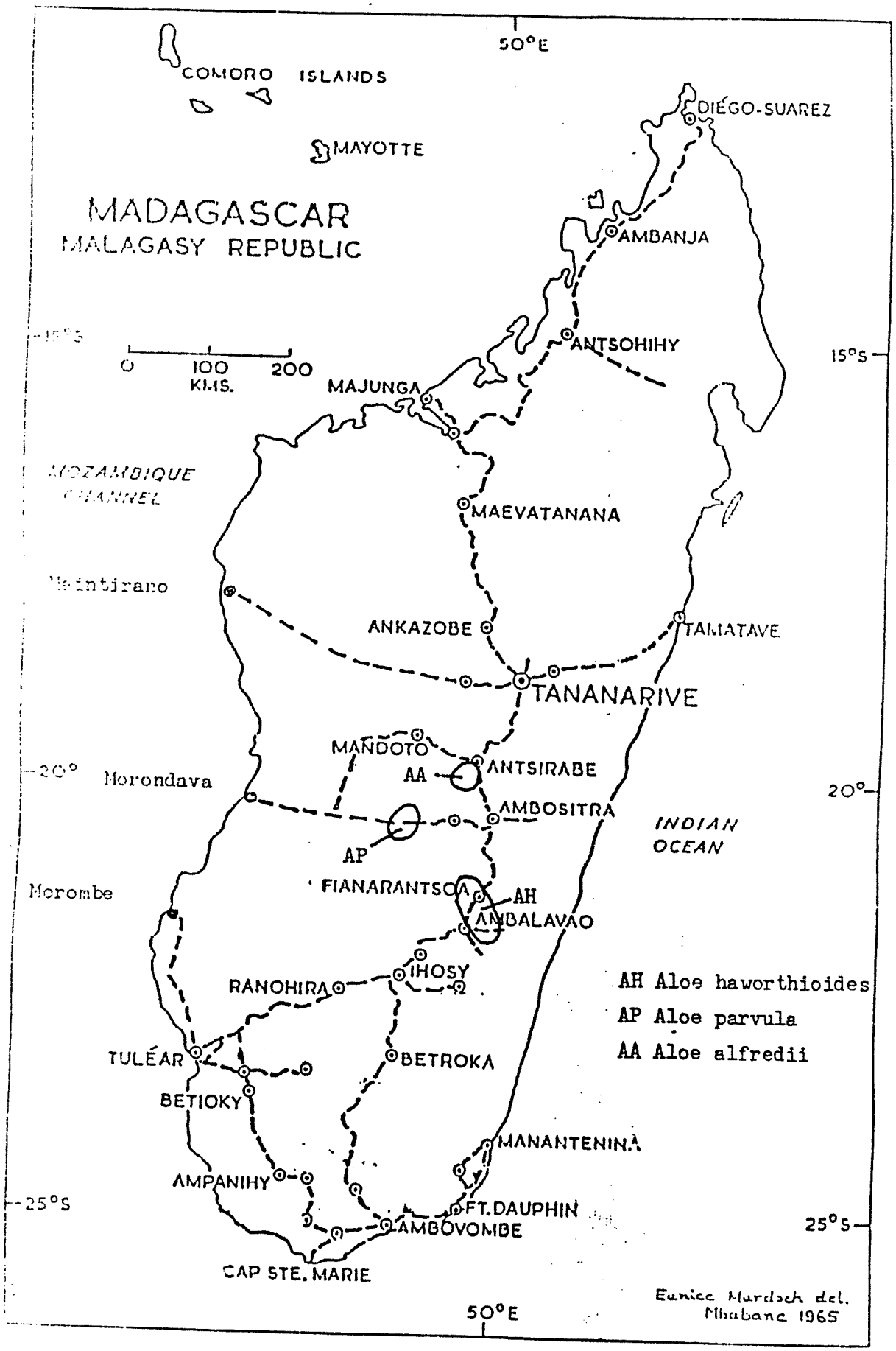
Hardy, D (1990). Aloe Haworthioides, *Aloe 27*, 1, 6-7.

Rauh, W (1990). Two New Aloes from Madagascar. *Cac. & Succ. Journ. (US)* 62:230-233.

Reynolds, G W (1958). Les Aloes de Madagascar [The Aloes of Madagascar]. *Le naturaliste malgache*, vol X (special volume). 156 pp. Institut de recherche scientifique de Madagascar, Tananarive.

Supthut, D & B von ARX (1992). *Madagascar 92: Rapport de mission* [Mission Report] (CITES Project S-52, Part 1). 50 pp. Unpublished.

WCMC (1991). *Review of significant trade in species of plants listed on Appendix II of CITES (1983-89)*.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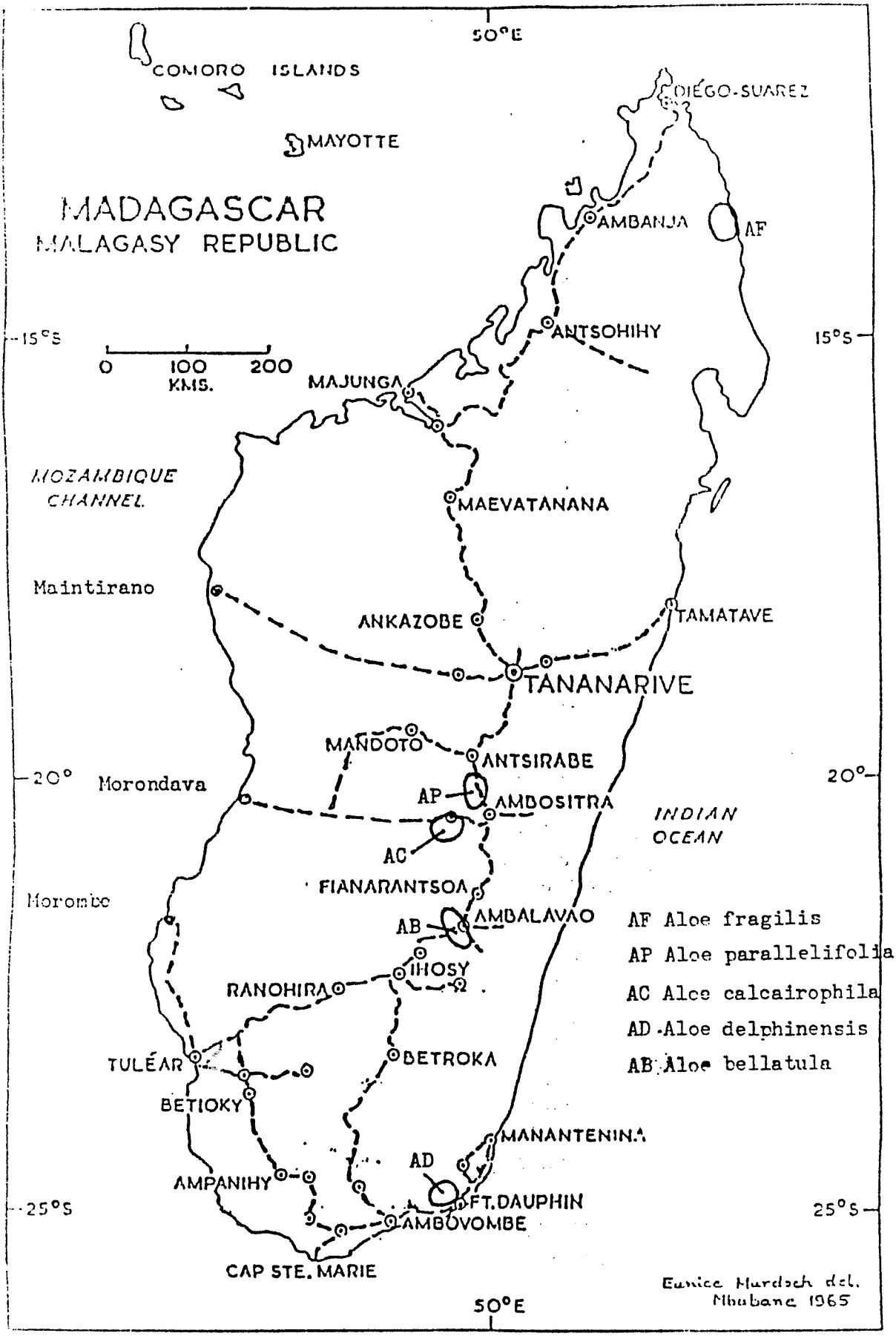
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AC Aloe calcairophila
AD Aloe delphinensis
AB Aloe bellatula
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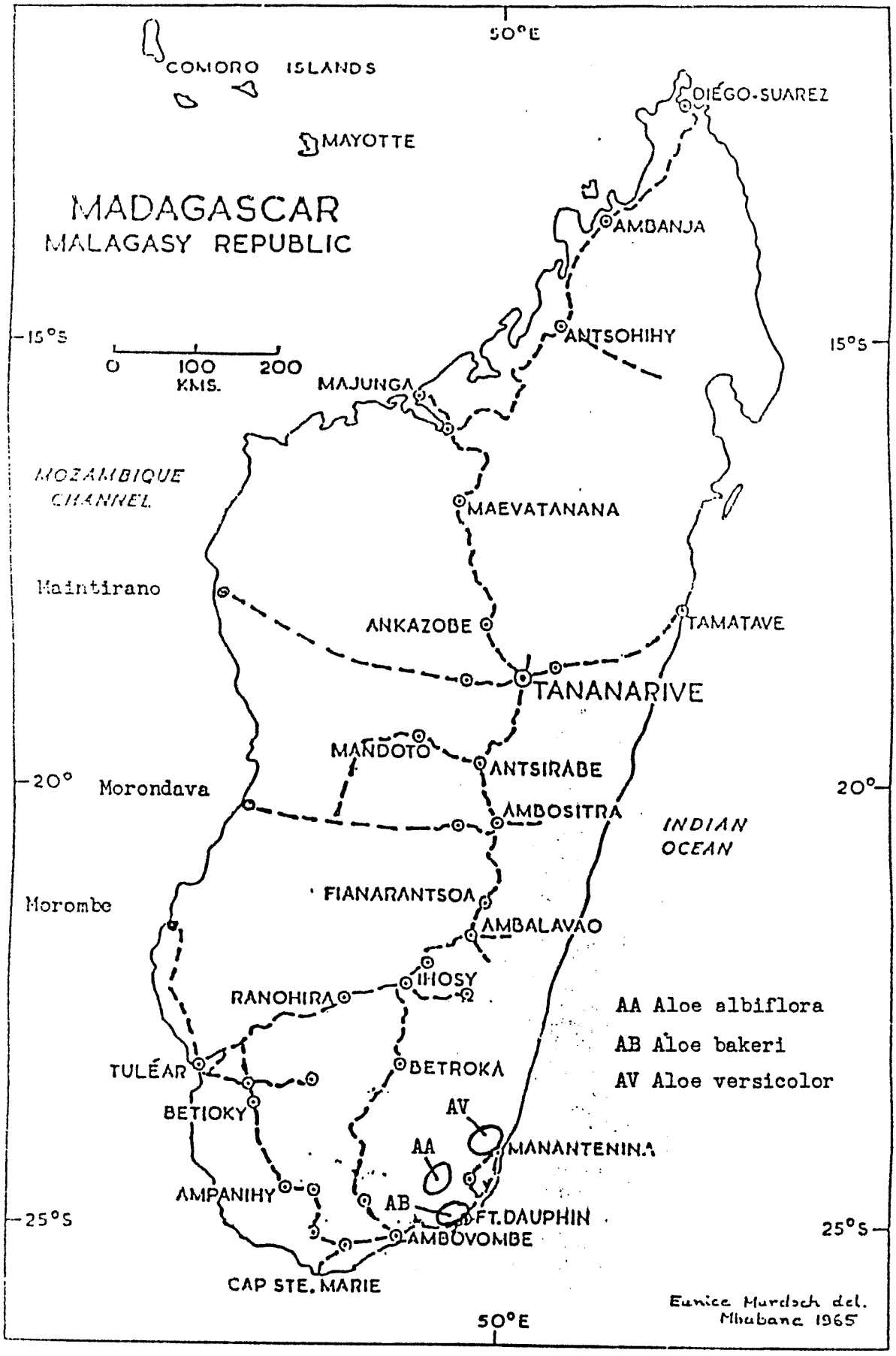
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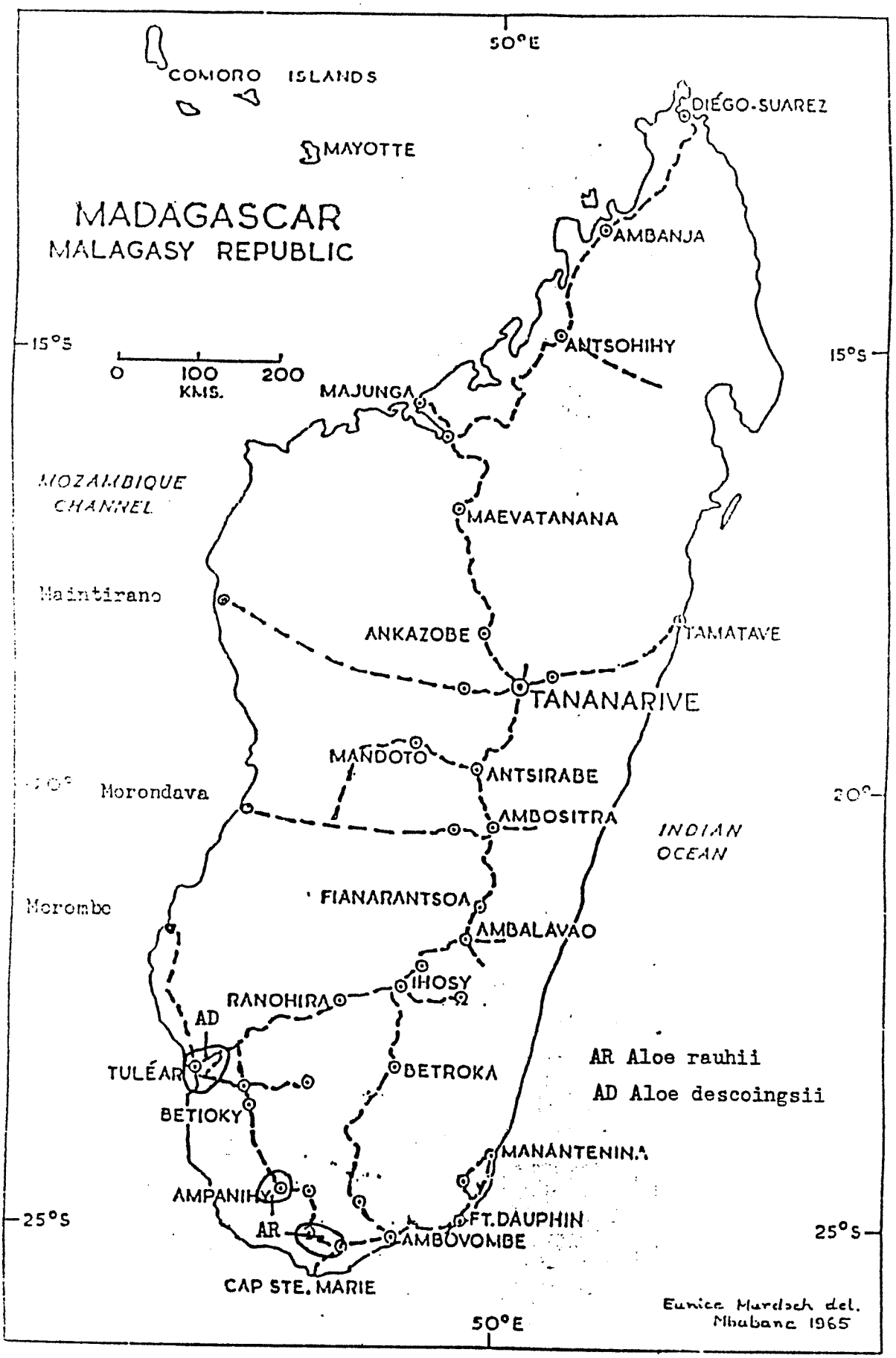
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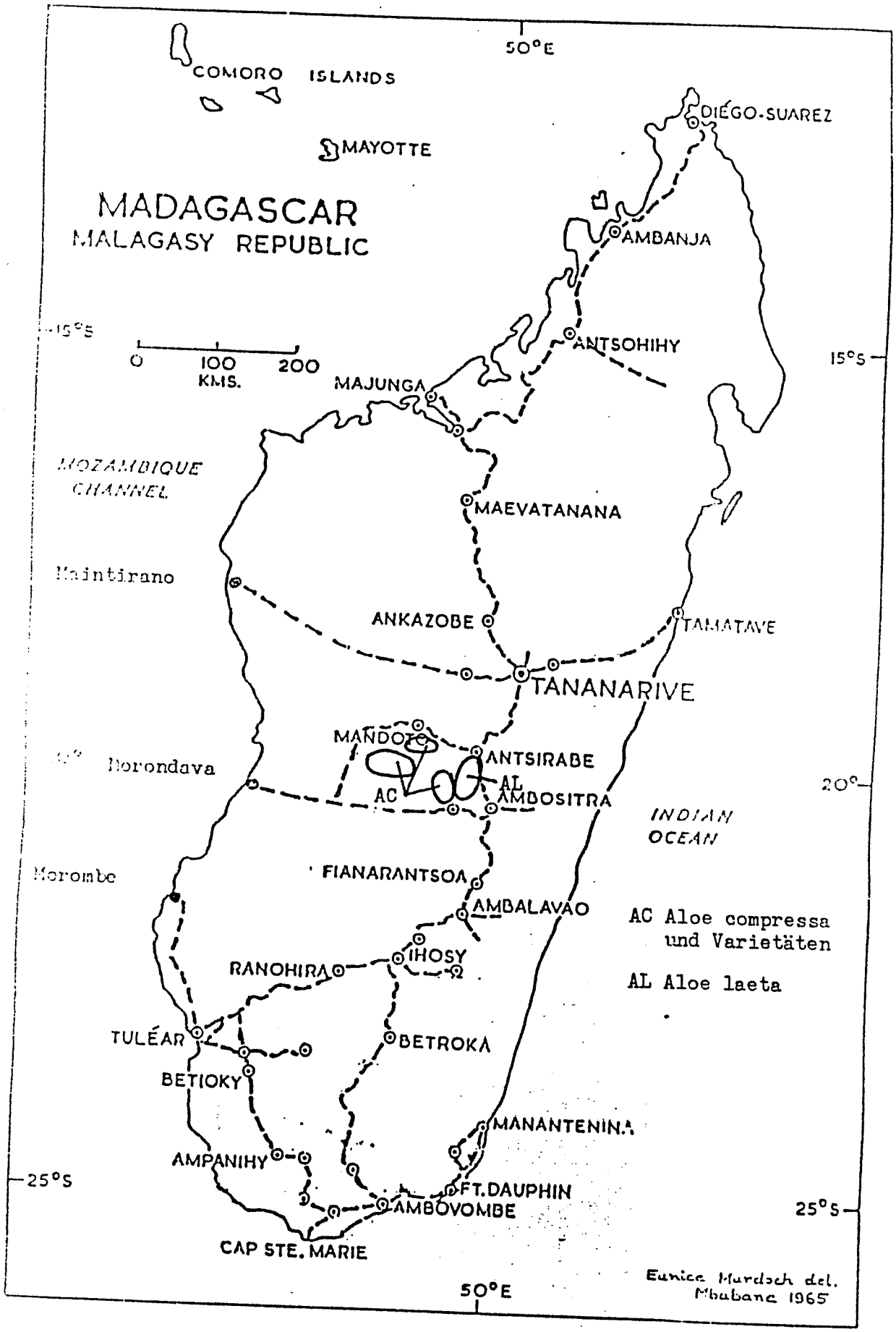

AC Aloe compressa und Varietäten

AL Aloe laeta