

An Inventory and Analysis of the Medicinal

Plants of Mozambique

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Introduction

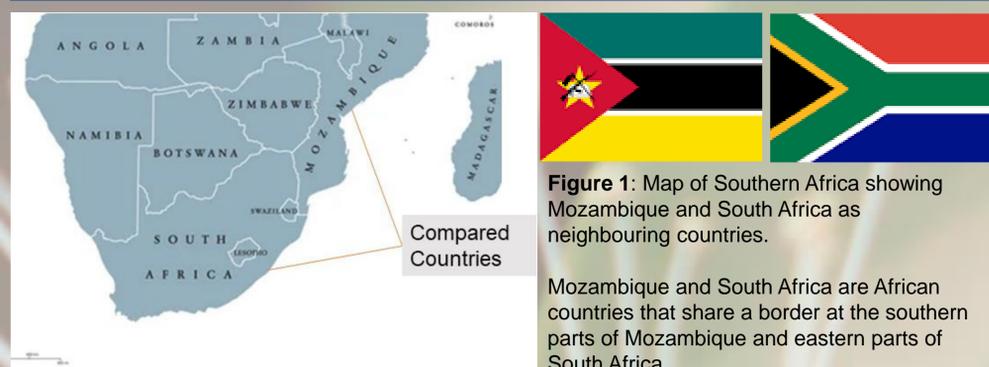


Figure 1: Map of Southern Africa showing Mozambique and South Africa as neighbouring countries.

Mozambique and South Africa are African countries that share a border at the southern parts of Mozambique and eastern parts of South Africa.

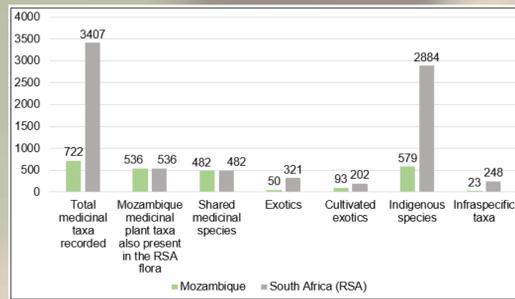


Figure 1: Overview of the statistics of the medicinal flora of Mozambique in comparison to that of South Africa.

Table 1: Cultivated exotic species in Mozambique that are native (Column 1) and introduced (Column 2) in South Africa

Species native to South Africa but cultivated exotics in Mozambique	Species introduced to South Africa but are cultivated exotics in Mozambique
<i>Alepidia amatymbica</i> Eckl. & Zeyh.	<i>Amaranthus caudatus</i> L.
<i>Crinum bulbisperrum</i> (Burm.f.) Milne-Redh. & Schweick.	<i>Capsicum annuum</i> L.
<i>Cucumis africanus</i> L.f.	<i>Guizotia abyssinica</i> L.f. Cass.
<i>Diospyros galepini</i> (Hiern) De Winter	<i>Jacaranda mimosifolia</i> D.Don
<i>Gymnosporia heterophylla</i> (Eckl. & Zeyh.) Lees.	<i>Morus alba</i> L.
<i>Harpagophytum procumbens</i> (Burch.) DC. ex Meisn.	<i>Nerium oleander</i> L.
<i>Hydnora abyssinica</i> A.Br.	<i>Solanum nigrum</i> L.
<i>Hypoxis obtusa</i> Burch. ex Ker Gawl.	
<i>Tephrosia capensis</i> (Jacq.) Pers.	
<i>Xerophyta retinervis</i> Baker	

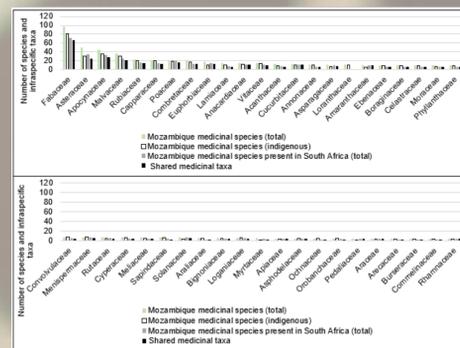


Figure 2: Summary of the species diversity of medicinal plants in Mozambique, comparing the numbers of Mozambique medicinal species used as medicine in South Africa. An average of 67% of the Mozambique medicinal species in South Africa are also used in South Africa.

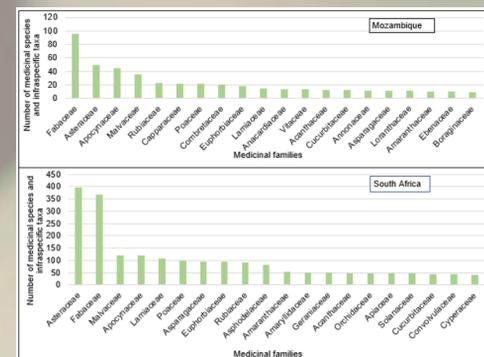


Figure 3: The 20 most taxon-rich medicinal plant families in Mozambique (top graph) and South Africa (bottom graph), showing the number of species and infraspecific taxa in the medicinal flora.

Mozambique is endowed with various medicinal plants. Approximately 60% of the population in Mozambique relies on traditional medicine to treat and manage simple to complex diseases (Ministry of Coordination of Environmental Affairs, 2009).

Several ethnobotanical surveys to study the medicinal flora of Mozambique have been conducted in various parts of the country. The most prominent surveys being that of Amico (1968), Amico and Bavazzano (1977), and Jansen and Mendes (1983; 1984; 1990; 1991). There are other 22 known sources that reported on the medicinal plants of Mozambique.

Aims

- This study aimed to record all medicinal plants reported in Mozambique in literature and answer three main questions.
- 1. How many medicinal plant species have been recorded for Mozambique? Of those, how many are indigenous to Mozambique, and how many are introduced or cultivated exotics?
- 2. What percentage of medicinal plant species are shared with South Africa?
- 3. What are the similarities and differences between the medicinal floras of Mozambique and South Africa? Is there evidence of cultural exchange?

Materials and Methods



Results

A comprehensive checklist of medicinal plants of Mozambique was compiled from 28 literature sources. It comprises of 722 medicinal plant species, of which 23 are infraspecific taxa. The medicinal species and infraspecific taxa are from 118 families and 442 genera. Of the recorded medicinal taxa in Mozambique, 536 (74%) were found to be occurring in the total available flora of South Africa. As shown in Figure 1, 482 (67%) taxa are used medicinally both in Mozambique and South Africa. Thus, showing a considerable overlap between the medicinal flora of Mozambique and that of South Africa.

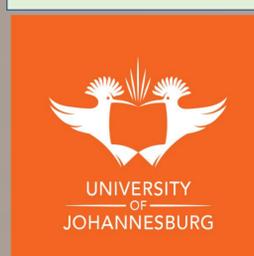
Conclusions

Mozambique's medicinal species and infraspecific taxa checklist presented here is comprehensive. The high percentage of shared medicinal species and infraspecific taxa between Mozambique and South Africa could suggest an exchange of traditional knowledge between the two countries borders. Compared to South Africa, the number of medicinal plant species recorded in Mozambique is relatively low. However, more surveys could lead to more medicinal species and infraspecific taxa discovered for Mozambique.

References

- Ministry of the coordination of Environmental Affairs. 2009. Fourth National Report on the conservation of biological diversity in Mozambique. Maputo, MICOA, 95.
- Amico, A., 1977. Medicinal plants of southern Zambesia. *Fitoterapia* 48, 101–135.
- Amico, A., Bavazzano, R., 1968. Contributo alla conoscenza della Flora della Zambesia inferiore (Moz.). II. Catalogo sistematico delle piante raccolte con riferimento agli usi terapeutici. *Webbia* 23, 247–303.
- Jansen, P.C.M., Mendes, O., 1983. *Plantas Mediciniais - Seu Uso Tradicional em Mocambique*. Tomo 1. Ministério da Saúde, Maputo, 216.
- Jansen, P.C.M., Mendes, O., 1984. *Plantas Mediciniais - Seu Uso Tradicional em Mocambique*. Tomo 2. Ministério da Saúde, Maputo, 259.
- Jansen, P.C.M., Mendes, O., 1990. *Plantas Mediciniais - Seu Uso Tradicional em Mocambique*. Tomo 3. Ministério da Saúde, Maputo, 302.
- Jansen, P.C.M., Mendes, O., 1991. *Plantas Mediciniais - Seu Uso Tradicional em Mocambique*. Tomo 4. Ministério da Saúde, Maputo, 227.

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