

CONVENTION SUR LE COMMERCE INTERNATIONAL DES ESPÈCES
DE FAUNE ET DE FLORE SAUVAGES MENACÉES D'EXTINCTION



Vingt-septième session du Comité pour les plantes
Genève (Suisse), 8 – 13 juillet 2024

Annexes de la Convention

Questions de nomenclature

Nomenclature botanique

NOMENCLATURE POUR LES PACHYPODIUMS (*PACHYPODIUM* SPP.)

1. Le présent document a été préparé par le Secrétariat, en étroite coopération avec la spécialiste de la nomenclature botanique du Comité pour les plantes.
2. À sa 19^e session (CoP19, Panama, 2022), la Conférence des Parties a adopté les décisions 19.287 et 19.288, *Nomenclature pour les pachypodiums* (*Pachypodium* spp.) :

À l'adresse du Secrétariat, en coopération étroite avec la spécialiste de la nomenclature du Comité pour les plantes

19.287 Le Secrétariat, en coopération étroite avec la spécialiste de la nomenclature du Comité pour les plantes :

- a) sous réserve de financements externes, commande l'élaboration d'une référence de nomenclature normalisée actualisée pour *Pachypodium* spp., en tenant compte des éléments pertinents figurant au paragraphe 6 de l'addendum au document PC25 Doc. 31 ; et
- b) rend compte au Comité pour les plantes de l'état d'avancement ou des résultats de ces travaux.

À l'adresse du Comité pour les plantes

19.288 Le Comité pour les plantes :

- a) examine les avancées ou résultats rapportés par le Secrétariat conformément à la décision 19.287 ;
 - b) fournit des informations pour aider à la préparation de la liste actualisée de *Pachypodium*, comme indiqué au paragraphe 6 de l'Addendum du document PC25 Doc. 31 ; et
 - c) fait des recommandations à la Conférence des Parties, s'il y a lieu.
3. À sa 26^e session (PC26 ; Genève, juin 2023), le Comité pour les plantes a examiné le document [PC26 Doc. 43.7](#), *Nomenclature pour les pachypodiums* (*Pachypodium* spp.) et a donné son avis sur le mandat

aux fins de remplacer la référence de nomenclature normalisée en vigueur pour pachypodiums¹ (voir compte rendu résumé [PC26 SR](#)).

4. Depuis la 26^e session du Comité pour les plantes, le Secrétariat a préparé une référence de nomenclature actualisée pour pachypodiums avec la contribution des Royal Botanic Gardens Kew (RBG Kew) et de la spécialiste de la nomenclature.
5. L'annexe 1 du présent document contient le projet de référence de nomenclature demandé dans la décision 19.287 pour examen par le Comité pour les plantes. L'annexe 2 contient des listes lisibles par une machine en format excel comme demandé à la 26^e session du Comité pour les plantes.
6. Ces projets de documents seront révisés d'après l'avis du Comité pour les plantes et le Secrétariat estime qu'une version finalisée de la référence de nomenclature normalisée sera disponible bien avant la 20^e session de la Conférence des Parties, pour examen par la CoP, et inclusion dans l'annexe de la [Resolution Conf. 12.11 \(Rev. CoP19\)](#), *Nomenclature normalisée*, le cas échéant.

Recommandations

7. Le Comité pour les plantes est invité à :
 - a) donner un avis sur le projet de référence de nomenclature normalisée contenu dans les annexes 1 et 2 du présent document ;
 - b) décider que les décisions 19.287 et 19.288 ont été appliquées et que leur suppression peut être proposée à la 20^e session de la Conférence des Parties ; et
 - c) recommander l'amendement de la résolution Conf. 12.11 (Rev. CoP19), *Nomenclature normalisée* pour remplacer la référence de nomenclature actuelle sur pachypodiums par la référence de nomenclature contenue dans les annexes 1 et 2 du présent document.

¹ CITES Aloe and Pachypodium Checklist (U. Eggli *et al.*, 2001, compiled by Städtische SukkulantenSammlung, Zurich, Switzerland, in collaboration with the Royal Botanic Gardens, Kew, United Kingdom of Great Britain and Northern Ireland) and its update: *An Update and Supplement to the CITES Aloe & Pachypodium Checklist* [J. M. Lüthy (2007), CITES Management Authority of Switzerland, Bern, Switzerland] as a guideline when making reference to the names of species of Aloe and Pachypodium.

CITES *Pachypodium* Checklist

First edition: April 2024.

Prepared under contract for the CITES Secretariat by the Royal Botanic Gardens, Kew.

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Chapter 1 Introduction

1. Background

The first CITES nomenclature checklist for the genus *Pachypodium* in the family Apocynaceae was published in 2001 in the “CITES *Aloe* and *Pachypodium* Checklist” with 14 species and 2 horticultural hybrids listed as accepted (Newton & Rowley 2001). A CITES Identification Manual for “The *Aloes* and *Euphorbias* of CITES Appendix I and the Genus *Pachypodium*” was published in 2006 with descriptions and illustrations for 20 *Pachypodium* species (Lüthy 2006). An update and supplement to the CITES *Aloe* and *Pachypodium* checklist was published in 2007 (Lüthy 2007) with a comparison of *Pachypodium* names in the checklist and identification manual.

An updated CITES checklist for *Pachypodium* was agreed at the Conference of the Parties at its 19th Meeting (CoP19, 2022) in decisions 19.287 & 19.288 “Nomenclature for Pachypodiums (*Pachypodium* spp.)” (CITES 2024, also published in PC26 Doc 43.7 (CITES 2023)). It was agreed at PC26 that the updated checklist for *Pachypodium* would be published separately to an updated checklist for the genus *Aloe* (CITES 2023).

Pachypodium are native to Southern Africa and Madagascar and are an important horticultural genus. They are spiny, succulent, xerophytic shrubs or small trees, often with a narrow distribution in specific habitats (Burge *et al.* 2013). *Pachypodium lamerei*, *P. rosulatum* and *P. brevicaule* are the most common species in international trade, with most trade in artificially propagated live plants (CITES Wildlife TradeView 2024).

The genus *Pachypodium* was included on Appendix II in 1975 except for four species, *P. ambongense*, *P. baronii*, *P. decaryi* and *P. windsorii* which are listed in Appendix I. *Pachypodium* species listed on Appendix II have the annotation #4 (CITES 2024).

Annotation #4 (CoP19)

All parts and derivatives except:

- a) seeds (including seedpods of Orchidaceae), spores and pollen (including pollinia). The exemption does not apply to seeds from Cactaceae spp. exported from Mexico, and to seeds from *Beccariophoenix madagascariensis* and *Dypsis decaryi* exported from Madagascar;
- b) seedling or tissue cultures obtained *in vitro* transported in sterile containers;
- c) cut flowers of artificially propagated plants;
- d) fruits, and parts and derivatives thereof, of naturalized or artificially propagated plants of the genus *Vanilla* (Orchidaceae) and of the family Cactaceae;
- e) stems, flowers, and parts and derivatives thereof, of naturalized or artificially propagated plants of the genera *Opuntia* subgenus *Opuntia* and *Selenicereus* (Cactaceae);
- f) finished products of *Aloe ferox* and *Euphorbia antisyphilitica* packaged and ready for retail trade; and
- g) finished products derived from artificial propagation, packaged and ready for retail trade of cosmetics containing parts and derivatives of *Bletilla striata*, *Cynoches cooperi*, *Gastrodia elata*, *Phalaenopsis amabilis* or *Phalaenopsis lobbii*.

2. Methodology

2.1 Data sources

The dataset for *Pachypodium* was provided by the World Checklist of Vascular Plants (WCV) – an international collaborative programme with more than 150 contributors from 22 countries available on the Plants of the World Online website (Govaerts *et al.* 2021, POWO 2024). The main goal of the WCV checklist is to provide high-quality peer-reviewed baseline data on all accepted taxa included in each plant family. A download from the WCV was made on 18th July 2023 of all *Pachypodium* species names, including infraspecific names and associated synonyms.

The WCV download was compared with the CITES *Aloe* and *Pachypodium* Checklist (Newton & Rowley 2001), the update and supplement (Lüthy 2007) and The World Flora Online (WFO 2024) and any extra names were added.

2.2. Literature review

The list of *Pachypodium* names was reviewed with consultation of relevant literature (see Bibliography for a full list of references).

Since 2001 several taxonomic and nomenclatural papers have been published with new species and subspecies described, together with some changes in taxonomic rank. Lüthy (2004) presented a revised classification of *Pachypodium*, and subsequently described a new arborescent species from Madagascar, *P. mikea* (Lüthy 2005), and a new subspecies of *P. rosulatum*, subsp. *bemarahense* (Lüthy & Lavranos 2005). Additional taxa of non-arborescent *Pachypodium* from Madagascar were described by Lüthy (2008) (*P. brevicaule* subsp. *leucoxanthum*) and Pavelka *et al.* (2014) (*P. enigmaticum*). The evolutionary diversification of the genus based on a phylogenetic analysis was published in two papers in 2013 (Burge 2013 and Burge *et al.* 2013). Field guides published by Rösli (2015, 2018) reflect the state of knowledge of the Malagasy taxa at this time. Goyder *et al.* (2020) presented an overview of the non-arborescent highland clade of Malagasy *Pachypodium* and finally, correction of an error relating to the geographic origin and identity of *P. cactipes* (Castillon *et al.* 2021) necessitated further nomenclatural changes.

Since the first checklist in 2001 some species are now considered at species level, instead of subspecies or variety level, while others have newly published subspecies or varieties or changes to rank.

Nine illegitimate names of *Pachypodium* species in the family Brassicaceae were recorded in WCV (POWO 2024). These names are synonyms that refer to plants that are not true *Pachypodium* in the Apocynaceae family. These nine names are illegitimate because the genera that they were described under are illegitimate according to the rule of nomenclature set out by the International Code of Nomenclature for algae, fungi, and plants (Turkland *et al.* 2017). The genus *Pachypodium* Lindl. in the Apocynaceae was published in 1830 (IPNI 2024). Two illegitimate genera were published later, *Pachypodium* Webb & Berthel in 1836 and *Pachypodium* Nutt in 1838, both in the Brassicaceae family (IPNI 2024). Because these do not refer to true pachypodiums they are not covered by the CITES Appendix II genus listing as they are not part of the accepted genus *Pachypodium* Lindl. that was included in the original listing proposal. However, we have included these nine illegitimate names in Chapter 2 under excluded names to prevent possible confusion.

3. How to use the CITES checklist

Chapter 2 provides the full taxonomic list of *Pachypodium* names listed alphabetically. The first list contains all the published names for *Pachypodium* with authors, accepted names are in bold. This includes a list of excluded illegitimate *Pachypodium* names in the Brassicaceae family. The second lists all the accepted names with a list of their synonyms and country distribution. Two artificial hybrids are included in this checklist as they were included in the first CITES *Aloe* and *Pachypodium* checklist (Newton & Rowley 2001), but no other *Pachypodium* hybrids are included.

Chapter 3 provides a list of countries, and species known to occur within each country. Where occurrence of a species is uncertain this is noted after the species name in brackets as '[uncertain]'.

Chapter 4 contains information for each accepted *Pachypodium* species including any infraspecific names, synonyms, common names in English, French and Spanish, country distributions and CITES Appendix listing. No trade names were found for *Pachypodium* species so a section for these is not included. In Madagascar all *Pachypodium* species are called “Dwarf baobab” in English or “Baobab nain”

in French to distinguish them from the true Baobab (*Adansonia*) species. The Madagascan *Pachypodium* species have their own common names in Malagasy, but these are not included in this checklist.

Place and year of publication for *Pachypodium* names are not included in the checklist, however, these are available at Plants of the World Online (2024), the International Plant Names Index (2024), and Tropicos (2024).

IUCN Conservation status is not included in this checklist but the latest assessments for *Pachypodium* species are available on the IUCN Red List (2024). Common names in other languages apart from English, French and Spanish are listed in Lüthy (2006). Descriptions for each species are not included in this checklist but can be found in local Floras, Lüthy (2005 and 2006) and Rapanarivo *et al.* (1999). A separate Microsoft Excel file of all the names in this checklist can be found on the CITES website.

4. Acknowledgements

The checklist was compiled by Emma Williams and David Goyder from the Royal Botanic Gardens Kew, UK and Franck Rakotonasolo from the Kew Madagascar Conservation Centre, Madagascar and Parc Botanique et Zoologique de Tsimbazaza, Antananarivo, Madagascar.

We acknowledge all the previous work on CITES checklists and identification guides for *Pachypodium* by Len Newton, Gordan Rowley, Urs Eggli and Jonas Lüthy and the work by Rafael Govaerts compiling the WCV data. We also thank Nick Black at RBG Kew for his help downloading data from WCV, the IPNI team (Jonathan Kendon, Helen Hartley and Emma Wrangmore) for help answering queries on nomenclature and Sonia Dhanda and Jessica Grey for their support.

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Chapter 2 *Pachypodium* Nomenclature

2.1 All names

Accepted names in bold. Synonyms in plain font.

Adenium namaquanum Wyley ex Harv. = ***Pachypodium namaquanum* (Wyley ex Harv.) Welw.**

Barleria rigida Spreng. ex Schltld. = ***Pachypodium succulentum* (L.f.) Sweet**

Belonites bispinosus (L.f.) E.Mey = ***Pachypodium bispinosum* (L.f.) A.DC.**

Belonites succulentus (L.f.) E.Mey = ***Pachypodium succulentum* (L.f.) Sweet**

Echites bispinosus L.f. = ***Pachypodium bispinosum* (L.f.) A.DC.**

Echites succulentus L.f. = ***Pachypodium succulentum* (L.f.) Sweet**

Echites tuberosus Haw. ex Steud. = ***Pachypodium succulentum* (L.f.) Sweet**

***Pachypodium ambongense* Poiss.**

***Pachypodium baronii* Costantin & Bois**

Pachypodium baronii var. *baronii* = ***Pachypodium baronii* Costantin & Bois**

Pachypodium baronii var. *erythreum* Poiss. = ***Pachypodium baronii* Costantin & Bois**

Pachypodium baronii var. *windsorii* (Poiss.) Pichon = ***Pachypodium windsorii* Poiss.**

Pachypodium bicolor Lavranos & Rapan. = ***Pachypodium rosulatum* subsp. *bicolor* (Lavranos & Rapan.) Lüthy**

***Pachypodium bispinosum* (L.f.) A.DC.**

***Pachypodium brevicaule* Baker**

Pachypodium brevicaule* subsp. *brevicaule

***Pachypodium brevicaule* subsp. *leucoxanthum* Lüthy**

Pachypodium brevicalyx (H.Perrier) Pichon = ***Pachypodium densiflorum* Baker**

Pachypodium cactipes K.Schum. = ***Pachypodium rosulatum* subsp. *rosulatum***

Pachypodium cactipes sensu Rapanarivo & Leeuwenberg (excluding type) = ***Pachypodium stenanthum* (Costantin & Bois) J.-B.Castillon, J.-P.Castillon & Rapan.**

Pachypodium champenoisianum Boiteau = ***Pachypodium lamerei* Drake**

***Pachypodium decaryi* Poiss.**

***Pachypodium densiflorum* Baker**

Pachypodium densiflorum var. *brevicalyx* H.Perrier = ***Pachypodium densiflorum* Baker**

Pachypodium densiflorum var. *densiflorum* = ***Pachypodium densiflorum* Baker**

Pachypodium drakei Costantin & Bois = ***Pachypodium rosulatum* subsp. *rosulatum***

***Pachypodium eburneum* Lavranos & Rapan.**

***Pachypodium enigmaticum* Pavelka, Prokes, V.Vlk, Lavranos, Zidek & Ramav.**

***Pachypodium geayi* Costantin & Bois**

Pachypodium giganteum Engl. = ***Pachypodium lealii* Welw.**

Pachypodium glabrum G.Don = ***Pachypodium bispinosum* (L.f.) A.DC.**

Pachypodium gracilius (H.Perrier) Rapan. = ***Pachypodium rosulatum* subsp. *gracilius* (H.Perrier) Lüthy**

Pachypodium griquense L.Bolus = ***Pachypodium succulentum* (L.f.) Sweet**

***Pachypodium* × *hojnyi* Halda**

***Pachypodium horombense* Poiss.**

***Pachypodium inopinatum* Lavranos**

Pachypodium jasminiflorum L.Bolus = ***Pachypodium succulentum* (L.f.) Sweet**

***Pachypodium lamerei* Drake**

Pachypodium lamerei var. *lamerei* = ***Pachypodium lamerei* Drake**

Pachypodium lamerei var. *ramosum* (Costantin & Bois) Pichon = ***Pachypodium lamerei* Drake**

Pachypodium lamerei var. *typicum* = ***Pachypodium lamerei* Drake**

***Pachypodium lealii* Welw.**

Pachypodium lealii subsp. *lealii* = ***Pachypodium lealii* Welw.**

Pachypodium lealii subsp. *saundersii* (N.E.Br.) G.D.Rowley = ***Pachypodium saundersii* N.E.Br.**

Pachypodium makayense Lavranos = ***Pachypodium rosulatum* subsp. *makayense* (Lavranos) Lüthy**

***Pachypodium menabeum* Leandri**

Pachypodium meridionale (H.Perrier) Pichon = ***Pachypodium rutenbergianum* Vatke**

***Pachypodium mikea* Lüthy**

***Pachypodium namaquanum* (Wyley ex Harv.) Welw.**

Pachypodium obesum A.DC. = ***Adenium obesum* (Forssk.) Roem. & Schult.**

Pachypodium ramosum Costantin & Bois = ***Pachypodium lamerei* Drake**

***Pachypodium* × *rauhii* Halda**

***Pachypodium rosulatum* Baker**

***Pachypodium rosulatum* subsp. *bemarahense* Lüthy & Lavranos**

Pachypodium rosulatum forma *bicolor* (Lavranos & Rapan.) G.D.Rowley = ***Pachypodium rosulatum* subsp. *bicolor* (Lavranos & Rapan.) Lüthy**

***Pachypodium rosulatum* subsp. *bicolor* (Lavranos & Rapan.) Lüthy**

Pachypodium rosulatum subsp. *cactipes* (K.Schum.) Lüthy = ***Pachypodium rosulatum* subsp. *rosulatum***

Pachypodium rosulatum subsp. *cactipes* sensu Lüthy (excluding type) = ***Pachypodium stenanthum* (Costantin & Bois) J.-B.Castillon, J.-P.Castillon & Rapan.**

Pachypodium rosulatum var. *delphinense* H.Perrier = ***Pachypodium stenanthum* (Costantin & Bois) J.-B.Castillon, J.-P.Castillon & Rapan.**

Pachypodium rosulatum var. *drakei* (Costantin & Bois) Markgr. = ***Pachypodium rosulatum* subsp. *rosulatum***

Pachypodium rosulatum var. *eburneum* (Lavranos & Rapan.) G.D.Rowley = ***Pachypodium eburneum* Lavranos & Rapan.**

***Pachypodium rosulatum* subsp. *gracilius* (H.Perrier) Lüthy**

Pachypodium rosulatum var. *gracilius* H.Perrier = ***Pachypodium rosulatum* subsp. *gracilius* (H.Perrier) Lüthy**

Pachypodium rosulatum var. *horombense* (Poiss.) G.D.Rowley = ***Pachypodium horombense* Poiss.**

Pachypodium rosulatum var. *inopinatum* (Lavranos) G.D.Rowley = ***Pachypodium inopinatum* Lavranos**

***Pachypodium rosulatum* subsp. *makayense* (Lavranos) Lüthy**

Pachypodium rosulatum* subsp. *rosulatum

Pachypodium rosulatum forma *stenanthum* Costantin & Bois = ***Pachypodium stenanthum* (Costantin & Bois) J.-B.Castillon, J.-P.Castillon & Rapan.**

Pachypodium rosulatum var. *typicum* = ***Pachypodium rosulatum* subsp. *rosulatum***

***Pachypodium rutenbergianum* Vatke**

Pachypodium rutenbergianum forma *lamerei* (Drake) Poiss. = ***Pachypodium lamerei* Drake**

Pachypodium rutenbergianum var. *meridionale* H.Perrier = ***Pachypodium rutenbergianum* Vatke**

Pachypodium rutenbergianum var. *perrieri* Poiss. = ***Pachypodium sofiense* (Poiss.) H.Perrier**

Pachypodium rutenbergianum var. *rutenbergianum* = ***Pachypodium rutenbergianum* Vatke**

Pachypodium rutenbergianum var. *sofiense* Poiss. = ***Pachypodium sofiense* (Poiss.) H.Perrier**

Pachypodium rutenbergianum var. *typicum* = ***Pachypodium rutenbergianum* Vatke**

***Pachypodium saundersii* N.E.Br.**

***Pachypodium sofiense* (Poiss.) H.Perrier**

***Pachypodium stenanthum* (Costantin & Bois) J.-B.Castillon, J.-P.Castillon & Rapan.**

***Pachypodium succulentum* (L.f.) Sweet**

Pachypodium succulentum Steud. = ***Pachypodium succulentum* (L.f.) Sweet**

Pachypodium tomentosum G.Don = ***Pachypodium succulentum* (L.f.) Sweet**

Pachypodium tuberosum Lindl. = ***Pachypodium bispinosum* (L.f.) A.DC.**

Pachypodium tuberosum var. *loddigesii* A.DC. = ***Pachypodium bispinosum* (L.f.) A.DC.**

Pachypodium tuberosum var. *tuberosum* = ***Pachypodium bispinosum* (L.f.) A.DC.**

***Pachypodium windsorii* Poiss.**

Excluded names

All excluded names are in the Brassicaceae family, their accepted names follow Plants of the World Online (POWO 2024).

Pachypodium brachycarpum Torr. = *Thelypodium brachycarpum* (Torr.) Torr.

Pachypodium bursifolium (L.) Endl. = *Sisymbrella dentata* (L.) O.E.Schulz

Pachypodium columnae (Jacq.) Webb = *Sisymbrium orientale* L.

Pachypodium erysimoides (Desf.) Webb & Berthel. = *Sisymbrium erysimoides* Desf.

Pachypodium integrifolium Nutt. = *Thelypodium integrifolium* (Nutt.) Endl.

Pachypodium laciniatum Nutt. = *Thelypodium laciniatum* (Hook.) Endl.

Pachypodium linearifolium (A.Gray) A.Gray = *Hesperidanthus linearifolius* (A.Gray) Rydb.

Pachypodium pannonicum (Jacq.) Endl. = *Sisymbrium altissimum* L.

Pachypodium sagittatum (Nutt.) Nutt. = *Thelypodium sagittatum* (Nutt.) Endl.

2.2. Accepted Names

***Pachypodium baronii* Costantin & Bois**

Pachypodium baronii var. *baronii*; *Pachypodium baronii* var. *erythreum* Poiss.

Distribution = Madagascar

***Pachypodium bispinosum* (L.f.) A.DC.**

Belonites bispinosus (L.f.) E.Mey; *Echites bispinosus* L.f.; *Pachypodium glabrum* G.Don; *Pachypodium tuberosum* Lindl; *Pachypodium tuberosum* var. *loddigesii* A.DC.; *Pachypodium tuberosum* var. *tuberosum*

Distribution = South Africa

***Pachypodium brevicaule* Baker**

Distribution = Madagascar

Pachypodium brevicaule* subsp. *brevicaule

Distribution = Madagascar

***Pachypodium brevicaule* subsp. *leucoxanthum* Lüthy**

Distribution = Madagascar

***Pachypodium decaryi* Poiss.**

Distribution = Madagascar

***Pachypodium densiflorum* Baker**

Pachypodium brevicalyx (H.Perrier) Pichon; *Pachypodium densiflorum* var. *brevicalyx* H.Perrier;
Pachypodium densiflorum var. *densiflorum*

Distribution = Madagascar

***Pachypodium eburneum* Lavranos & Rapan.**

Pachypodium rosulatum var. *eburneum* (Lavranos & Rapan.) G.D.Rowley

Distribution = Madagascar

***Pachypodium enigmaticum* Pavelka, Prokes, V.Vlk, Lavranos, Zidek & Ramav.**

Distribution = Madagascar

***Pachypodium geayi* Costantin & Bois**

Distribution = Madagascar

***Pachypodium* × *hojnyi* Halda**

Distribution = Only in cultivation

***Pachypodium horombense* Poiss.**

Pachypodium rosulatum var. *horombense* (Poiss.) G.D.Rowley

Distribution = Madagascar

***Pachypodium inopinatum* Lavranos**

Pachypodium rosulatum var. *inopinatum* (Lavranos) G.D.Rowley

Distribution = Madagascar

***Pachypodium lamerei* Drake**

Pachypodium champenoisianum Boiteau; *Pachypodium lamerei* var. *lamerei*; *Pachypodium lamerei* var. *ramosum* (Costantin & Bois) Pichon; *Pachypodium lamerei* var. *typicum*; *Pachypodium ramosum* Costantin & Bois; *Pachypodium rutenbergianum* forma *lamerei* (Drake) Poiss.

Distribution = Madagascar

***Pachypodium lealii* Welw.**

Pachypodium giganteum Engl.; *Pachypodium lealii* subsp. *lealii*

Distribution = Angola, Botswana [Uncertain] and Namibia

***Pachypodium menabeum* Leandri**

Distribution = Madagascar

***Pachypodium mikea* Lüthy**

Distribution = Madagascar

***Pachypodium namaquanum* (Wyley ex Harv.) Welw.**

Adenium namaquanum Wyley ex Harv.

Distribution = Namibia and South Africa

***Pachypodium* × *rauhii* Halda**

Distribution = Only in cultivation

***Pachypodium rosulatum* Baker**

Distribution = Madagascar

***Pachypodium rosulatum* subsp. *bemarahense* Lüthy & Lavranos**

Distribution = Madagascar

***Pachypodium rosulatum* subsp. *bicolor* (Lavranos & Rapan.) Lüthy**

Pachypodium bicolor Lavranos & Rapan.; *Pachypodium rosulatum* forma *bicolor* (Lavranos & Rapan.) G.D.Rowley

Distribution = Madagascar

***Pachypodium rosulatum* subsp. *gracilius* (H.Perrier) Lüthy**

Pachypodium gracilius (H.Perrier) Rapan.; *Pachypodium rosulatum* var. *gracilius* H.Perrier

Distribution = Madagascar

***Pachypodium rosulatum* subsp. *makayense* (Lavranos) Lüthy**

Pachypodium makayense Lavranos

Distribution = Madagascar

Pachypodium rosulatum* subsp. *rosulatum

Pachypodium cactipes K.Schum.; *Pachypodium drakei* Costantin & Bois; *Pachypodium rosulatum* subsp. *cactipes* (K.Schum.) Lüthy; *Pachypodium rosulatum* var. *delphinense* H.Perrier; *Pachypodium rosulatum* var. *drakei* (Costantin & Bois) Markgr.; *Pachypodium rosulatum* var. *typicum*

Distribution = Madagascar

***Pachypodium rutenbergianum* Vatke**

Pachypodium meridionale (H.Perrier) Pichon; *Pachypodium rutenbergianum* var. *meridionale* H.Perrier; *Pachypodium rutenbergianum* var. *rutenbergianum*; *Pachypodium rutenbergianum* var. *typicum*

Distribution = Madagascar

***Pachypodium saundersii* N.E.Br.**

Pachypodium lealii subsp. *saundersii* (N.E.Br.) G.D.Rowley

Distribution = Mozambique, South Africa and Zimbabwe

***Pachypodium sofiense* (Poiss.) H.Perrier**

Pachypodium rutenbergianum var. *perrieri* Poiss.; *Pachypodium rutenbergianum* var. *sofiense* Poiss.

Distribution = Madagascar

***Pachypodium stenanthum* (Costantin & Bois) J.-B.Castillon, J.-P.Castillon & Rapan.**

Pachypodium cactipes sensu Rapanarivo & Leeuwenberg (excluding type); *Pachypodium rosulatum* forma *stenanthum* Costantin & Bois; *Pachypodium rosulatum* subsp. *cactipes* sensu Luthy (excluding type); *Pachypodium rosulatum* var. *delphinense* H.Perrier

Distribution = Madagascar

***Pachypodium succulentum* (L.f.) Sweet**

Barleria rigida Spreng. ex Schltld.; *Belonites succulentus* (L.f.) E.Mey; *Echites succulentus* L.f.; *Echites tuberosus* Haw. ex Steud.; *Pachypodium griquense* L.Bolus; *Pachypodium jasminiflorum* L.Bolus; *Pachypodium succulentum* Steud.; *Pachypodium tomentosum* G.Don

Distribution = South Africa

***Pachypodium windsorii* Poiss.**

Pachypodium baronii var. *windsorii* (Poiss.) Pichon

Distribution = Madagascar

Chapter 3: Country Checklist

Angola

Pachypodium lealii Welw.

Botswana

Pachypodium lealii Welw. [Uncertain]

Madagascar

Pachypodium ambongense Poiss.

Pachypodium baronii Costantin & Bois

Pachypodium brevicaule Baker

Pachypodium brevicaule subsp. *brevicaule*

Pachypodium brevicaule subsp. *leucoxanthum* Lüthy

Pachypodium decaryi Poiss.

Pachypodium densiflorum Baker

Pachypodium eburneum Lavranos & Rapan.

Pachypodium enigmaticum Pavelka, Prokes, V.Vlk, Lavranos, Zídek & Ramav.

Pachypodium geayi Costantin & Bois

Pachypodium horombense Poiss.

Pachypodium inopinatum Lavranos

Pachypodium lamerei Drake

Pachypodium menabeum Leandri

Pachypodium mikea Lüthy

Pachypodium rosulatum Baker

Pachypodium rosulatum subsp. *bemarahense* Lüthy & Lavranos

Pachypodium rosulatum subsp. *bicolor* (Lavranos & Rapan.) Lüthy

Pachypodium rosulatum subsp. *gracilius* (H.Perrier) Lüthy

Pachypodium rosulatum subsp. *makayense* (Lavranos) Lüthy

Pachypodium rosulatum subsp. *rosulatum*

Pachypodium rutenbergianum Vatke

Pachypodium sofiense (Poiss.) H.Perrier

Pachypodium stenanthum (Costantin & Bois) J.-B.Castillon, J.-P.Castillon & Rapan.

Pachypodium windsorii Poiss.

Mozambique

Pachypodium saundersii N.E.Br.

Namibia

Pachypodium lealii Welw.

Pachypodium namaquanum (Wyley ex Harv.) Welw.

South Africa

Pachypodium bispinosum (L.f.) A.DC.

Pachypodium namaquanum (Wyley ex Harv.) Welw.

Pachypodium saundersii N.E.Br.

Pachypodium succulentum (L.f.) Sweet

Zimbabwe

Pachypodium saundersii N.E.Br.

Chapter 4 Checklist

***Pachypodium ambongense* Poiss.**

- Synonyms = None
- Common names = Dwarf baobab [English], Baobab nain [French]
- Distribution = Madagascar
- CITES Appendix = I

***Pachypodium baronii* Costantin & Bois**

- Synonyms = *Pachypodium baronii* var. *baronii*; *Pachypodium baronii* var. *erythreum* Poiss.
- Common names = Dwarf baobab [English], Baobab nain [French]
- Distribution = Madagascar
- CITES Appendix = I

***Pachypodium bispinosum* (L.f.) A.DC.**

- Synonyms = *Belonites bispinosus* (L.f.) E.Mey; *Echites bispinosus* L.f.; *Pachypodium glabrum* G.Don; *Pachypodium tuberosum* Lindl; *Pachypodium tuberosum* var. *loddigesii* A.DC.; *Pachypodium tuberosum* var. *tuberosum*
- Common names = Bell-flower thick-foot, Porcupine potato [English]
- Distribution = South Africa
- CITES Appendix = II #4

***Pachypodium brevicaule* Baker**

- Synonyms = None
- Common names = Dwarf baobab [English], Baobab nain [French]
- Distribution = Madagascar
- CITES Appendix = II #4

Pachypodium brevicaule* subsp. *brevicaule

- Synonyms = None
- Common names = Dwarf baobab [English], Baobab nain [French]
- Distribution = Madagascar
- CITES Appendix = II #4

***Pachypodium brevicaule* subsp. *leucoxanthum* Lüthy**

- Synonyms = None
- Common names = Dwarf baobab [English], Baobab nain [French]
- Distribution = Madagascar
- CITES Appendix = II #4

***Pachypodium decaryi* Poiss.**

- Synonyms = None
- Common names = Dwarf baobab [English], Baobab nain [French]
- Distribution = Madagascar
- CITES Appendix = I

***Pachypodium densiflorum* Baker**

- Synonyms = *Pachypodium brevicalyx* (H.Perrier) Pichon; *Pachypodium densiflorum* var. *brevicalyx* H.Perrier; *Pachypodium densiflorum* var. *densiflorum*
- Common names = Dwarf baobab [English], Baobab nain [French]
- Distribution = Madagascar
- CITES Appendix = II #4

***Pachypodium eburneum* Lavranos & Rapan.**

- Synonyms = *Pachypodium rosulatum* var. *eburneum* (Lavranos & Rapan.) G.D.Rowley
- Common names = Dwarf baobab [English], Baobab nain [French]
- Distribution = Madagascar
- CITES Appendix = II #4

***Pachypodium enigmaticum* Pavelka, Prokes, V.Vlk, Lavranos, Zídek & Ramav.**

- Synonyms = None
- Common names = Dwarf baobab [English], Baobab nain [French]
- Distribution = Madagascar
- CITES Appendix = II #4

***Pachypodium geayi* Costantin & Bois**

- Synonyms = None
- Common names = Dwarf baobab, Madagascar palm [English], Baobab nain [French]
- Distribution = Madagascar
- CITES Appendix = II #4

***Pachypodium* × *hojnyi* Halda**

- Synonyms = None
- Common names = None
- Distribution = Only in cultivation
- CITES Appendix = II #4

***Pachypodium horombense* Poiss.**

- Synonyms = *Pachypodium rosulatum* var. *horombense* (Poiss.) G.D.Rowley
- Common names = Dwarf baobab [English], Baobab nain [French]
- Distribution = Madagascar
- CITES Appendix = II #4

***Pachypodium inopinatum* Lavranos**

- Synonyms = *Pachypodium rosulatum* var. *inopinatum* (Lavranos) G.D.Rowley
- Common names = Dwarf baobab [English], Baobab nain [French]
- Distribution = Madagascar
- CITES Appendix = II #4

***Pachypodium lamerei* Drake**

- Synonyms = *Pachypodium champenoisianum* Boiteau; *Pachypodium lamerei* var. *lamerei*; *Pachypodium lamerei* var. *ramosum* (Costantin & Bois) Pichon; *Pachypodium lamerei* var. *typicum*; *Pachypodium ramosum* Costantin & Bois; *Pachypodium rutenbergianum* forma *lamerei* (Drake) Poiss.
- Common names = Dwarf baobab, Madagascar palm [English], Baobab nain [French]
- Distribution = Madagascar
- CITES Appendix = II #4

***Pachypodium lealii* Welw.**

- Synonyms = *Pachypodium giganteum* Engl.; *Pachypodium lealii* subsp. *lealii*
- Common names = Bottle tree [English]
- Distribution = Angola, Botswana [Uncertain] and Namibia
- CITES Appendix = II #4

***Pachypodium menabeum* Leandri**

- Synonyms = None
- Common names = Dwarf baobab [English], Baobab nain [French]
- Distribution = Madagascar
- CITES Appendix = II #4

***Pachypodium mikea* Lüthy**

- Synonyms = None
- Common names = Dwarf baobab [English], Baobab nain [French]
- Distribution = Madagascar
- CITES Appendix = II #4

***Pachypodium namaquanum* (Wyley ex Harv.) Welw.**

- Synonyms = *Adenium namaquanum* Wyley ex Harv.
- Common names = Elephant's trunk [English]
- Distribution = Namibia and South Africa
- CITES Appendix = II #4

***Pachypodium × rauhii* Halda**

- Synonyms = None
- Common names = None

- Distribution = Only in cultivation
- CITES Appendix = II #4

***Pachypodium rosulatum* Baker**

- Synonyms = None
- Common names = Dwarf baobab [English], Baobab nain [French]
- Distribution = Madagascar
- CITES Appendix = II #4

***Pachypodium rosulatum* subsp. *bemarahense* Lüthy & Lavranos**

- Synonyms = None
- Common names = Dwarf baobab [English], Baobab nain [French]
- Distribution = Madagascar
- CITES Appendix = II #4

***Pachypodium rosulatum* subsp. *bicolor* (Lavranos & Rapan.) Lüthy**

- Synonyms = *Pachypodium bicolor* Lavranos & Rapan.; *Pachypodium rosulatum* forma *bicolor* (Lavranos & Rapan.) G.D.Rowley
- Common names = Dwarf baobab [English], Baobab nain [French]
- Distribution = Madagascar
- CITES Appendix = II #4

***Pachypodium rosulatum* subsp. *gracilius* (H.Perrier) Lüthy**

- Synonyms = *Pachypodium gracilius* (H.Perrier) Rapan.; *Pachypodium rosulatum* var. *gracilius* H.Perrier
- Common names = Dwarf baobab [English], Baobab nain [French]
- Distribution = Madagascar
- CITES Appendix = II #4

***Pachypodium rosulatum* subsp. *makayense* (Lavranos) Lüthy**

- Synonyms = *Pachypodium makayense* Lavranos
- Common names = Dwarf baobab [English], Baobab nain [French]
- Distribution = Madagascar
- CITES Appendix = II #4

Pachypodium rosulatum* subsp. *rosulatum

- Synonyms = *Pachypodium cactipes* K.Schum.; *Pachypodium drakei* Costantin & Bois; *Pachypodium rosulatum* subsp. *cactipes* (K.Schum.) Lüthy; *Pachypodium rosulatum* var. *delphinense* H.Perrier; *Pachypodium rosulatum* var. *drakei* (Costantin & Bois) Markgr.; *Pachypodium rosulatum* var. *typicum*
- Common names = Dwarf baobab [English], Baobab nain [French]
- Distribution = Madagascar
- CITES Appendix = II #4

***Pachypodium rutenbergianum* Vatke**

- Synonyms = *Pachypodium meridionale* (H.Perrier) Pichon; *Pachypodium rutenbergianum* var. *meridionale* H.Perrier; *Pachypodium rutenbergianum* var. *rutenbergianum*; *Pachypodium rutenbergianum* var. *typicum*
- Common names = Dwarf baobab [English], Baobab nain [French]
- Distribution = Madagascar
- CITES Appendix = II #4

***Pachypodium saundersii* N.E.Br.**

- Synonyms = *Pachypodium lealii* subsp. *saundersii* (N.E.Br.) G.D.Rowley
- Common names = Impala lily, Kudu lily [English]
- Distribution = Mozambique, South Africa and Zimbabwe
- CITES Appendix = II #4

***Pachypodium sofiense* (Poiss.) H.Perrier**

- Synonyms = *Pachypodium rutenbergianum* var. *perrieri* Poiss.; *Pachypodium rutenbergianum* var. *sofiense* Poiss.
- Common names = Dwarf baobab [English], Baobab nain [French]
- Distribution = Madagascar
- CITES Appendix = II #4

***Pachypodium stenanthum* (Costantin & Bois) J.-B.Castillon, J.-P.Castillon & Rapan.**

- Synonyms = *Pachypodium cactipes* sensu Rapanarivo & Leeuwenberg (excluding type); *Pachypodium rosulatum* forma *stenanthum* Costantin & Bois; *Pachypodium rosulatum* subsp. *cactipes* sensu Luthy (excluding type); *Pachypodium rosulatum* var. *delphinense* H.Perrier
- Common names = Dwarf baobab [English], Baobab nain [French]
- Distribution = Madagascar
- CITES Appendix = II #4

***Pachypodium succulentum* (L.f.) Sweet**

- Synonyms = *Barleria rigida* Spreng. ex Schltdl.; *Belonites succulentus* (L.f.) E.Mey; *Echites succulentus* L.f.; *Echites tuberosus* Haw. ex Steud.; *Pachypodium griquense* L.Bolus; *Pachypodium jasminiflorum* L.Bolus; *Pachypodium succulentum* Steud.; *Pachypodium tomentosum* G.Don
- Common names = Porcupine-kambroo, Star-flower thick-foot, Succulent Madagascar palm
- Distribution = South Africa
- CITES Appendix = II #4

***Pachypodium windsorii* Poiss.**

- Synonyms = *Pachypodium baronii* var. *windsorii* (Poiss.) Pichon
- Common names = Dwarf baobab [English], Baobab nain [French]
- Distribution = Madagascar
- CITES Appendix = I