

# UNIVERSITY OF VENDA



**Trees & Shrubs**  
***Reminder Mkansi***  
***1<sup>st</sup> edition 2017***

*66 tree species*

## Acknowledgments & Introduction



I'd like to express my gratitude to the University of Venda, UIGC and most especially to Ms. Mudau, for granting me an opportunity to be part of the nature conservation internship which took place at N'wanedi nature reserve in collaboration with the Limpopo Department of Economic Development, Environment & Tourism (LEDET), I also thank Ms. Ramulwela, Mr. Munyai and the rest of N'wanedi staff for their hospitality.

At first, it was all about identifying just a few tree species but within the process, boredom automatically escalated my enthusiasm and I therefore became obsessed with discovering more trees, hence this made patrolling within the field very interesting for me. Henceforth, with assistance from Mr. Makhokha, Mr. Muthego, Mr. Ngolobe, Mr. Thiba Mr. Tshilangano, Mr. Kwindu, Leonard and Michael, I've managed to discover and learn about some of the trees found within the reserve, thus I will forever be grateful for their kindness and willingness of helping me identify trees which they knew.

I've been lucky to be around throughout the entire seasons, therefore I was able to study the changes of trees very well. It has come into my attention that Leaves, barks, flowers and fruits are key diagnostic features to look for when identifying trees, and that there's always a unique feature that will distinguish a tree from the other.

I've decided to compile this document to keep a record of trees that I've learnt and able to capture which would help me in case of revision thereby serving as my reference in the near future. I believe it may also be helpful to other tree enthusiasts thus I will publish it on my website: <https://mkansireminder.wordpress.com>. All images had been captured within N'wanedi nature reserve using my smartphone with just a 5 MP of camera and no google images were featured. However, I've tried my best to capture key diagnostic features of the trees to simplify their identification.

***Enjoy!***

## Hints for species somewhat tricky to identify

- ✚ **Paperbark corkwood** is frequently found in mountainous or rocky environments. *Page 4*
- ✚ **Satin-bark corkwood** leaves are 3-foliolate or with 2 to 4 pairs of leaflets and a terminal leaf. Its branchlets aren't spiny. Maybe be confused with the **Common corkwood** which has clustered leaves and spiny branchlets. *Page 4*
- ✚ **Rough-leaved corkwood** bark is very pale grey to white and peels off in black thick flakes. The leaves are have 2 to 4 pairs of leaflets plus a larger terminal leaflet, hairy and rough, tapering apex and rounded base. *Page 5*
- ✚ **Tall common corkwood** leaves are typically in dense clusters at twig terminals or on the thorns. Maybe be confused with the **glossy-leaved corkwood** which has 3-trifoliolate leaves in dense clusters. *Page 6*
- ✚ **Forest fever tree** Leaves are clustered at the ends of the branchlets, obovate-oblong, apex broadly rounded and the base is tapering to rounded. *Page 8*
- ✚ **Small-leaved rock fig** Stem is yellow. Bark peels off in small flakes, leaves are hairy, hard, broadly ovate and arranged spirally around the twigs. It has a milky latex. *Page 13*
- ✚ **Lebombo ironwood** has heart-shaped leathery opposite leaves that are white and hairy below and dark green above, apex is broadly tapering. Petiole is covered by whitish hair. *Page 14*
- ✚ **Buffalo-thorn** leaves are 3 veined from the base. It has a straight spine and recurved one. *Page 15*
- ✚ **Pigeonwood** Bark is light grey on both the trunk and branches. Leaves are 3-veined from the oblique base, bright green above and pale green below, the margin is serrated, apex is tapering and the base is rounded to lobed. *Page 18*
- ✚ **Brown ivory** has soft palatable leaves with secondary veins looping to the margin in a herringbone pattern, its immature fruits are green but turn orange when ripe. *Page 20*
- ✚ **Knobbly creeper** is a climbing shrub with long trailing branches. Leaves are opposite to sub-opposite. Fruits are 5-winged and turn brown when matured. *Page 22*
- ✚ **Russet Bushwillow** Fruits are borne in clusters and have four-wings which are pale brown but have a dark central part. *Page 22*
- ✚ **Three-hook thorns** carry their spines in threes, two pointing backwards and one pointing forwards. Old stems are predominately yellow and the bark peels off in small thin flakes. *Page 25*

- ✚ **Horned thorn** is easily identified by its robust thorns and zigzagging twigs, typically grows in dry hard clay habitats, the pods are sickle-shaped. *Page 25*
- ✚ **Blue thorn** is a small multi-stemmed tree. Bark is yellow and peels off in thin yellow papery or flakes. Old stems are grey. Thorns are in pairs and sharply recurved. *Page 26*
- ✚ **Knob thorn** bark is dark brown with large knobby prickles. Old stems are dark grey with longitudinal fissures. Leaflets are in pairs and often semi-circular. Thorns are black and hooked. *Page 26*
- ✚ **Umbrella thorn** has 3 distinct pairs of spines, a recurved pair, a pair where one is straight & the other is recurved and a pair of straight spines. The crown resembles an umbrella shape *Page 27*
- ✚ **River thorn** has a bright green spring foliage and commonly grows next to river banks. *Page 28*
- ✚ **Scented thorn** has thorns in pairs with common bases, whitish but often reddish-brown and slightly furry, straight but slightly curved backwards. *Page 29*
- ✚ **Tree wisteria** leaves are lanceolate and drooping, margin is irregularly scalloped. Flowers are borne in clusters and bluish-mauve (purplish) *Page 33*

## Glossary

**3-foliolate** – in pairs of three.

**Apex** – tip or end part of a leaf.

**Foliage** – Plant Leaves collectively.

**Lanceolate** – Lance-shaped; widest about one-third from the base and pointed at both ends.

**Latex** – milky or clear liquid found in plants.

**Lobe** – deeply divided.

**Opposite** – leaves which occur in pairs but opposite to each other.

**Petiole** – leaf stalk.

**Scalloped** – smoothly toothed.

**Tapering** – narrowing of either the base or apex of a leaf.

**Terminal** - situated at the end.

**Whorl** – circle of leaves arising from the same point (spirally arranged)

**Paperbark corkwood** (*Commiphora marlothii*)



**Satin-bark/white-stem corkwood** (*Commiphora tenuipetiolata*)



**Velvet-leaved Corkwood** (*Commiphora. mollis*)



**Rough-leaved corkwood** (*commiphora edulis*)



**African Myrrh/Hairy Corkwood** (*Commiphora africana*)



**Tall-common corkwood** (*Commiphora glandulosa*)



**Sweet-root corkwood** (*Commiphora neglecta*)



**Zebra-bark corkwood** (*Commiphora merkeri*)





**Forest fever-tree** (*Anthocleista grandiflora*)



**Lala-palm** (*Hyphaene natalensis*)



**Kosi palm** (*Raphia australis*)



**Wild-date palm** (*Phoenix reclinata*)



**White-trunked shepherd's/Shepherd's tree (*Boscia albitrunca*)**



**Stink Shepherds-tree (*Boscia foetida*)**



**Red-leaved fig (*Ficus ingens*)**



**Broom-cluster fig (*Ficus sur*)**



**Common cluster fig / Sycamore Fig (*Ficus sycomorus*)**



**Large-leaved rock fig (*Ficus abutilifolia*)**



**Small-leaved rock fig** (*Ficus tettensis*)



**Purple hook-berry** (*Artabotrys brachypetalus*)



**African Baobab** (*Adansonia digitata*)



**Lebombo Ironwood** (*Androstachys johnsonii*)



**White ironwood** (*Vepris undulata*)



**Buffalo thorn** (*Ziziphus mucronata*)





**Nyala bean** (*Xanthocercis zambesiaca*)



**Deadliest Euphorbia/Lesser candelabra** (*Euphorbia cooperi*)



**Rubber-hedge euphorbia** (*Euphorbia tirucalli*)



**Black Monkey orange** (*Strychnos madagascariensis*)



**African Pigeonwood** (*Trema orientalis*)



**Small green thorn** (*Balenites pedicellaris*)



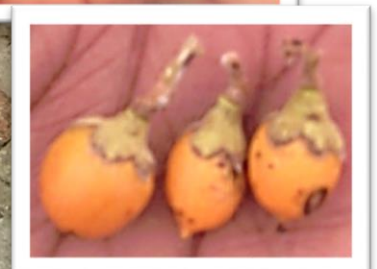
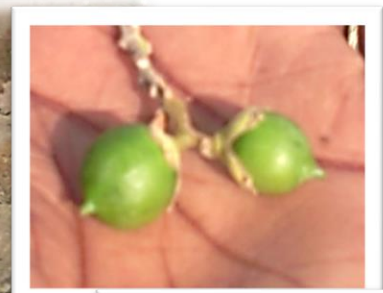
**Apple Leaf** (*Lonchocarpus Capassa*)



*Spring season*



**Satin-bark saucer-bush/Snot berry** (*Cordia ovalis*)



**Round-leaved saucer-berry** (*Cordia grandicalyx*)



**Mopane tree** (*Colophorspermum mopane*)



**Brown ivory** (*Berchemia discolor*)



**Transvaal sesame bush** (*Sesamothamnus lugardii*)



**Knobbly creeper** (*Combretum mossambicense*)



**Russet Bushwillow** (*Combretum hereroense*)



**Leadwood Bushwillow** (*Combretum imberbe*)



**Wood's cycad** (*Encephalartos woodii*)





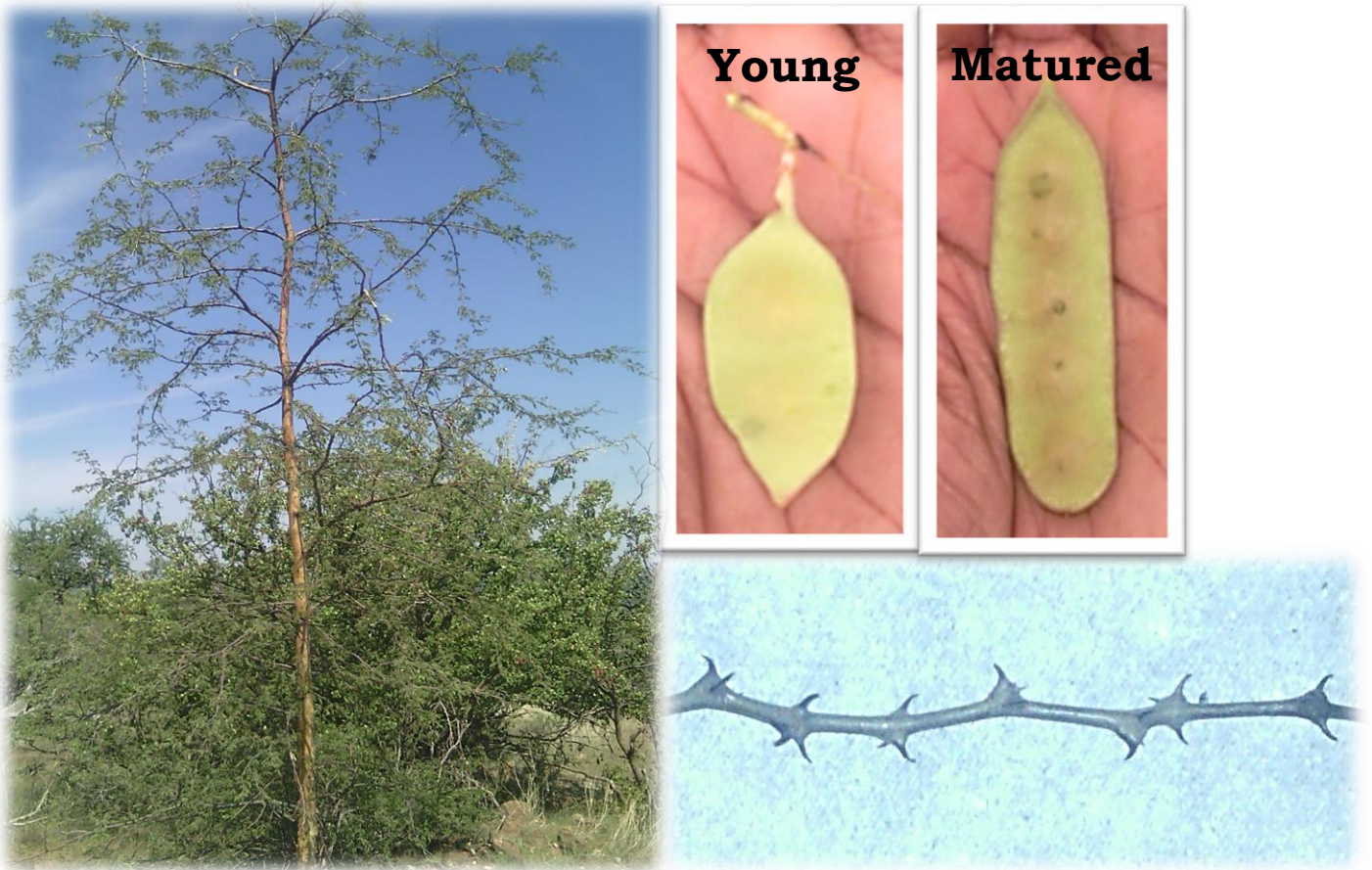
**Eastern Cape giant Cycads** (*Encephalartos altensteinii*)



**Bushy three-hook thorn** (*Acacia Senegal var. rostrata*)



**Slender three-hook thorn** (*Acacia Senegal* var. *leiorhachis*)



**Horned thorn** (*Acacia grandicornuta*)



**Blue thorn** (*Acacia erubescens*)



**Knob thorn** (*Acacia nigrescens*)



**Umbrella thorn** (*Acacia tortilis*)



**Fever thorn** (*Acacia xanthophloea*)



**Ankle thorn/River thorn** (*Acacia robusta*)



**Black monkey thorn** (*Acacia burkei*)



**River climbing thorn** (*Acacia schweinfurthii*)



**Scented thorn** (*Acacia nilotica*)



**Small knobwood** (*Zanthoxylum capensis*)



**White gardenia** (*Gardenia volkensii*)



**Gummy gardenia** (*Gardenia resiniflua*)



**Num-num** (*Carissa bispinosa*)





**Kudu berry** (*Pseudolachnostylis maprouneifolia*)



**Velvet-leaved sweetberry** (*Bridelia mollis*)



**Tree wisteria** (*Bolusanthus speciosus*)



**Cape teak** (*strychnos decussata*)



**Bushveld Impala-lily/Sabi star (*Adenium obesum*)**



**Cluster pine (*pinus pinaster*) Alien**



**Bastard cobas** (*Cyphostemma juttae*) *Alien*



**Butterfly orchid tree** (*Bauhinia purpurea*) *Alien*



**Prickly pear** (*Opuntia ficus-indica*) *Alien*



**Giant milkweed** (*Calatropis gigantea*) *Alien*



## References

Moll E. (2011) what's that tree? Stuik, Cape Town.

Palgrave KC. (1984) Trees of southern Africa, 2<sup>nd</sup> revised edition. Struik, Cape Town.

Van Wyk P. (1984) Field Guide to the trees of the Kruger national park, 1<sup>st</sup> edition, Struik, Cape Town.

*Bauhinia purpurea* butterfly tree. Retrieved from: <http://www.invasives.org.za/legislation/item/196-butterfly-orchid-tree-bauhinia-purpurea> on the 11<sup>th</sup> of November 2017.

*Castor-oil plant*, Invasive species South Africa. Retrieved from: <http://www.invasives.org.za/legislation/item/326-castor-oil-plant-ricinus-communis> on the 7<sup>th</sup> of December 2017.

*Combretum mossambicense*. Retrieved from: [https://en.m.wikipedia.org/wiki/File:Combretum\\_Mossambicense\\_Fruit.jpg](https://en.m.wikipedia.org/wiki/File:Combretum_Mossambicense_Fruit.jpg) on the 26<sup>th</sup> of November 2017.

*Commiphora africana* images, Useful tropical plants. Retrieved from: <http://tropical.theferns.info/image.php?id=Commiphora+africana> on the 26<sup>th</sup> of November 2017.

*Cluster-pine*, Invasive species South Africa. Retrieved from: <http://www.invasives.org.za/legislation/item/305-cluster-pine-pinus-pinaster> on the 9<sup>th</sup> of November 2017.

*Giant milkweed*, invasive species South Africa. Retrieved from: <http://www.invasives.org.za/component/k2/item/668-giant-milkweed-calotropis-procera> on the 6<sup>th</sup> of December 2017.

*Sweet prickly pear*, Invasive species South Africa. Retrieved from: <http://www.invasives.org.za/legislation/item/290-sweet-prickly-pear-opuntia-ficus-indica> on the 6<sup>th</sup> of December 2017.