

# **Picking the fruits of the heritage tree**

## **Volume 2**

### **The vines of wisdom**



Culture is like an entanglement of vines in the heart of the forest. It connects individuals into an impenetrable continuum of shared experiences and values. Culture brings people together through time and space, passing on the knowledge acquired over millennia. Now hold on tight! For our creative writers are taking you on an adventure. To celebrate our heritage, we shall go swing on the vines of wisdom.

*Joséphine Queffelec, Editor*

## Snack of the savannah



From the hills of Kigezi, to the gentle slopes of Ankole  
The sound of the drumbeat would be heard at thy arrival  
Teenagers and women running, up and down the savannah,  
Grasslands and hills  
In the November morning drizzles,  
To devour thee?  
Ooh, great art thee *nsenene*.

Butterflies from the west call thee long horned Grasshopper,  
But a bush cricket you are!  
No wonder thou hoops in the savannah grass  
I have heard, thou art called *Ruspolia differens*  
The language of the scientists?  
Ooh, great art thee *nsenene*.

Thy slender body with long horns,  
A delicacy for generations  
When roasted or fried, an incomparable snack,  
The sun shines on you, roasts and preserves!  
For Ugandans, in the Pearl of Africa  
Ooh loved *nseene*, thine is the greatness!

Luck and joy come with thee  
Yet some consider thee a taboo  
Women were dissuaded from tasting thee  
In the name of taboos, a preserve for men  
Hail the waves of the world, for now we also bite thee!  
For the greatness of thy delicacy, is so tempting,  
That we call thee our friend, while devouring thee?

With modernity, gone are the cat and mouse chase memories  
For the commercial urban sharks harvest thee in plenty  
With strong electric flowers,  
Thou slips to their containers  
And the old grandma, will buy thee from the supermarket  
To fill her dish  
Ooh, how great thou art!

Thy greatness is even in death, for thy wings,  
Evict the pests, from the farms  
As though the taste is not enough.  
Ooh, great *nseene*, Wonderful is thy name!

*Agil Katumanyane, Uganda*



## Merging of traditions through traditional biotechnology



In South Africa our rich cultural diversity is sometimes subtly interwoven into a unique flavour. To me it is epitomized by my grandmother's Butterkuchen. It is a humble traditional German cake baked for special occasions. The cake consists of simple ingredients found in most households, flour, milk, butter, eggs, sugar, and yeast. However, during my grandmother's time in rural KwaZulu

Natal baking yeast was difficult to get. My grandmother used local Zulu traditional biotechnology as a resource for the leavening agent for her Butterkuchen.

Traditional Zulu beer is brewed from maize and sorghum. Brewing beer is a sacred ritual that forms a golden thread of traditions linking generations of Zulu women. The fermentation process takes place over several days during which some of the foam that bubbles up at the surface of the beer is harvested and dried. The dried foam is then used as a starter for the next batch of beer. This uniquely fragrant mix of yeasts (and possibly numerous other microorganisms) also became the essential leavening agent to make my grandmother's Butterkuchen. I clearly remember the saucer of Zulu beer foam, generously provided by the local Zulu women, drying in my grandmother's kitchen in preparation for the baking day. This magical substance then helped to leaven the Butterkuchen batter creating an unforgettable and unique Zulu-German fragrance in the woodstove-warmed kitchen. Then the cake was baked in the same woodstove resulting in the perfect golden brown celebratory treat with a unique flavour. In my youth I certainly did not appreciate the wealth of Zulu and German tradition and heritage merging into this humble cake. Today when I try to recreate the cake with store bought yeast it is never the same as I remember from my grandmother's kitchen. I realize that this unique combination of Zulu and German traditions is the part of the unique flavour of my heritage as a German-speaking South African. I also contemplate 'who' out there in the magical community of microorganisms quietly contributed to this merging of two traditions.

*Renate Zipfel, South Africa*

### **Tshidzimba, a protein-rich meal of unity**



The end of summer was always the most exciting time for me as a young girl growing up in a small village of Makonde, located just outside Thohoyandou, in the Limpopo province of South Africa. This period is often marked by communal family activities such as harvesting of maize, beans, and groundnuts. After harvest, some of the maize is stored in mud silos where it provides a year-round ingredient for various dishes. One of these dishes is known as “Tshidzimba”, a combination of groundnuts, beans, and samp, a meal rich in protein. The

preparation of this dish is elaborate and often requires multiple hands. From preparing samp by removing maize kernels from the cob, to milling groundnuts and eventually cooking, this meal preparation is a family affair. It is therefore one way to bring family and relatives together for a rewarding activity. Pre-preparation begins with soaking of samp and beans overnight followed by milling of large quantities of ground nuts into a fine powder. Large mortars and pestles are used to mill the groundnuts, an activity which involves two or more people depending on the size of the mortar and pestle. Cooking takes place in a large potjie type pot over the fire. I recall my cousins and I would sit around the crackling fire together with the family elders singing songs and listening to stories. We would sing songs known as “Zwidade” and the elders would tell Tshivenda tales known as “Dzingano”. “Dzingano is a collection of Tshivenda tales which do not necessarily represent things as they are in reality; yet they can carry important life lessons. Vha-Venda elders thus use “Dzingano” to give life guidance to young people. Once cooked, Tshidzimba shelf life is only a maximum of three days, therefore one must share this meal with all the neighbours and friends in the village. A meal that truly unifies people.

*Pfano Mbedzi, South Africa*

## **The peach tree**

The peach tree is beautiful. The pink flowers gifts it with the awe it exudes. However, the most prized possession is the peach fruit. Which I love. My fascination with the peach tree comes from the fact that it is both food and shelter. Humans are grinding their teeth in anticipation, but we are not the only ones waiting for the peach tree to bear fruit. The bees can't wait to finally drop their part time applications for pollination jobs to the often-self-pollinating pink flowers. The worms are also excited to eat, birds are ready to build homes in the highest branches.

I remember we had three peach trees at home, two that grew yellow and one that grew white coloured peaches. I particularly loved the white coloured peaches, very yummy, juicy, and sweet with a fascinating flesh with red and white patches. In my younger years the peach tree also indicated that Christmas was near. This was because the “Christmas birds”, with their yellow or orange plumage would suddenly emerge in spring. You can imagine how joyous the site of a peach tree was to me.

In my community we wait for the season of the peach because we know it has more than enough to offer us. The empty mayonnaise jars are carefully stored away in the gloomy months waiting in anticipation to be sterilized for peach canning or jam making. This is one of the highlights of having a peach tree. I recall putting as many peaches as I could in a blue metal bowl and sitting with my mother as we peeled them and prepared water with brown sugar to cook the peaches. A delicacy for Christmas desert. You see the peach is food, four peaches would leave me full. Moreover, all who have not planted, start eyeing the tree waiting to ask, sometimes only to get disappointed when the owner says no. I remember one particular story my mom told me of a lady who was, as some may say “stingy” with her peaches. She hung a jar full of tea bags and water to the tree to keep children away. But children are very curious. They shook the jar, opened it, realised it was harmless and finally feasted on the peaches. The story still tickles me, till this day.

The trunk of the peach tree should not be left out in this story, it oozes sap. I tried to eat it but didn't like it. I've recently learnt it is gummosis disease. However, a tree like that has the best peaches hands down. In the township we don't really wait for the peaches to ripen. Sometimes we eat raw peaches with salt. Fascinating, isn't it? Be careful of the peach flesh though or you will itch, peaches are best when washed.

*Mamokete Bokhale, South Africa*

## Aloes: a stable companion through life in South Africa



Growing up in South Africa, Aloes have been a stable presence that have marked my life in different ways through the years. This is not surprising, since southern Africa is a major diversity hot spot for Aloes, with South Africa boasting approximately 155 local species. One of my earliest memories of Aloes in my life was for a primary school project. I don't remember the specifics now, but I do remember it becoming a team effort with my Dad. He was so excited by the idea of Aloes as the theme for this

project, he had always loved the bright display of blooming Aloes in the neatly curated gardens of the Union Buildings (the official seat of the South African Government). His then hobby, photography – which later became his job and made him somewhat of a Pretoria legend, was kicked into overdrive and I remember us missioning out to get the perfect shot for this school report.

Aloes are well known for their healing powers and medicinal properties. I remember, as a teenager slathering huge gobs of *Aloe vera* (*Aloe barbadensis miller*) gel all over myself in the hopes that it would ease the sunburn after hours of beach adventures during the school holidays. Interestingly enough, this *Aloe* is in fact native to the Arabian Peninsula and not Southern Africa. However, it is the most famous aloe and coveted for its soothing gel. As I moved into my thirties, I was pulled aside by a well-meaning aunt and told the secret to staying young was *Aloe ferrox*. Indeed, this aloe seems to be forming the base of more and more cosmetics on South African shelves, and I religiously dab it on my crows' feet hoping to age gracefully ... but not too quickly. When I moved to California for my postdoc, in that foreign land, I always found the *Aloe* garden managed by their conservatory to be a perfect place to find my grounding and remind me of home. It turned out the University of California, Davis ran a big *Aloe* propagation project and one year I took home a little *Aloe humilis* from the conservatory plant sale to have a piece of home on my windowsill.

Aloes are pollinated by both insect and bird pollinators and many iconic images of Aloes have a sunbird proudly displaying on a brightly coloured inflorescence. Aloes play an important ecological role for maintaining pollinator populations through the winter, since many species are winter flowering and often the only source of pollen and nectar for kilometres around. My current research has a strong focus on plant-pollinator interactions and there are many interesting questions that spring to mind about *Aloe* flower and pollinator diversity, which would be wonderful to explore sometime in the future. However, for now I am content to let these beautiful blooms remind me of home and elicit precious memories of my late father and our adventure to the Union buildings all those years ago.

*Nicky Creux, South Africa*



## Hidden from sight, masked by the beauty of their hosts and decidedly South African



Hidden in the darkness within the cones of some *Protea* species native to the southern tip of Africa, a remarkable assemblage of fungi has evolved. These beautiful organisms were unknown to the world until only a few decades ago, when they were discovered simply by chance. They are remarkable in many ways. Perhaps most interestingly, that they are very close relatives of the Ophiostomatoid Fungi, symbionts of bark beetles that infest conifers in the northern hemisphere. But back to the Ophiostomatoid fungi that live in the cones of some *Protea* species.

Most species of *Protea* are native to the southern tip of Africa that is home to the smallest but mega- diverse floral Kingdoms, known by various names including the “Fynbos Biome”, the Cape Floral Kingdom and the Cape Floristic Region. The flowers of *Protea* species occur in cones known scientifically as infructescences. These impressive, large and colourful structures open for a relatively short period of time during which they are pollinated by birds, arthropods and other animals. After pollination, they close and mature, remaining on the woody plants for long periods of time (serotiny) until the seeds are released, often after an exposure to fire. In this respect, they



are much like the cones of some conifer species native to the Northern Hemisphere, which are also serotinous.

Two phylogenetically distinct groups of Ophiostomatoid fungi occur in the cones of serotinous *Protea* species. These *Protea* fungi reside in the two genera *Knoxdaviesia* and *Sporthrix* and their congeners in conifers would be

genera such as *Ceratocystis* and *Ophiostoma* respectively. Those conifer fungi include some of the most destructive causal agents of tree diseases; for example, Dutch Elm Disease that has devastated native elm trees in Europe and North America. Although we know little regarding the role of the *Protea* Ophiostomatoid fungi, there is no evidence that they cause disease. It is more likely that they protect the *Protea* seeds from predation by insects and as such play a vital part in the ecosystems of the Fynbos.

The *Protea* Ophiostomatoid fungi are decidedly South African. And as such, part of the heritage of our country. The Proteas are ancient amongst the flowering plants and pre-Pangea would likely have existed in close proximity to the equally ancient conifers. It seems most unlikely to be a mere co-incidence that they are home to the very same two distinct groups of fungi that are symbionts of conifer-infesting bark beetles. There remains much to be learned about these amazing fungi associated with *Protea* species. They are certainly as beautiful and as fascinating as the Proteas themselves. It seems a shame that they remain unseen by the many thousands of people that visit South Africa to marvel at the beauty of the Proteas.

*Mike Wingfield, South Africa*

## La lande aux Korrigans



In the French region of Brittany, on the high cliffs at the edge of world, grows a hardy vegetation adapted to poor soils. Often battered by the wind and the tempestuous sea, the shrubs grow low and dense. We call that vegetation “la lande”. In summer when the sun finally chases the clouds away, “la lande” flowers. To me, the most magnificent participants of these summer demonstrations are the common gorse, *Ulex europeaus*, and the bell heather, *Erica cinerea*. Their delicate yellow and purple flowers cover the cliffs with an enchanted carpet that I always feel lucky to witness.

If I were to take you, dear reader, on a walk among “la lande”, we might even gaze upon the granite giants of Brittany. These giants, called “Menhirs”, are large stones that have been standing in cercles for millennia. My ancestors have put them there to witness and to embody the movements of the stars in the night sky. They are the grandparents of Stonehenge. Perhaps less imposing but much more ancient. Their presence tells the stories of the generations of celts that have been inhabiting this region. They whisper myths, tails and legends to whomever lends an ear.





One of the many tales from Brittany is the legend of the “Korrigans”. Those local pixies live in “la lande” and are believed to come out at night to play tricks on the hikers that dared to venture out too late. Thankfully for humans, the “Korrigans” favourite activity is to dance and sing all night! For this reason, if you, reader, are ever captured by “Korrigans” in “la lande” and want to go home without a scratch, put your dancing shoes on. You might just live through a night to remember!

*Joséphine Queffelec, France*



**Photo credits**

**Vines:** <https://unsplash.com/s/photos/jungle-vines>

**Nsenene:** <https://en.wikipedia.org/wiki/Nsenene#/media>

**Butterkuchen:** Renate Zipfel

**Tshidzimba:** <http://www.vendaland.org/foods.html#!/-1/>

**Aloes:** Nicky Creux

**Proteas:** <https://swallowsnestfarm.blogspot.com/2014/06/protea-repens-sugarbush.html>

**Ophiostomatoid fungi:** Mike Wingfield

**Menhirs:** <https://fetedelanature.com/association-les-landes>

**La lande:** <https://www.flickr.com/photos/sidaths/9562889346>