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FROM THE EDITOR

This is it then! 2022 is almost wrapped up and this is our final newsletter edition for the year. We hope that you have enjoyed all the information that we have curated in these newsletters and that it has been valuable in your business or research or just in getting you better informed in Africa, its people and their rich plant traditions.

In this edition, we have included a rather unusual monograph. Unusual because it is about a non-African plant; yet *Ricinus communis* - **Casterbean** is held in high regard by African traditional healers. I have known it to be used for treating ear infections and also making sacred beads for spirit mediums. The author of this monograph is Chantel Van Dyk who is an entrepreneur based in Pretoria, South Africa and is using castor bean in her products. And let us not forget that this unassuming bean has a global market value of over USD`1.2 billion. Ethiopia leads on exports and Kenya and Nigeria are further down the ranks. So it's worth investing in standards for this product.

We pay tribute to a colleague and mentor we have lost recently, **Prof Charles Wambebe**, one of the pioneers of ethnopharmacology research. His work is done.



[Ricinus communis - Wikipedia link](#)

One of the most lucrative areas of working with African plants is the essential and seed oil trade. We talk to a true legend in this space, **Karen Swanepoel**, a real inspiration of how persistence pays off! Thanks Karen for making time for our chat.

This Christmas edition tries to highlight all the places we have been to and the people we have met. You can look at the back issues on our website and be sure to subscribe to our Connect Conversation youtube channel. With your continued financial support, we will be back next year. May your Christmas be Merry, Blessed and Safe. May 2023 be Healthy and Prosperous. Be well.

AUTHOR
CHANTEL VAN DYK



Chantel van Wyk is a farmer who has an interest in product development from herbal products. She has recently completed the PharmaConnect Africa / University of Pretoria programme; Manufacture and registration of herbal and cannabis - based medicines.

Ricinus communis – Castor bean

Q: Can you share some fun facts about the species that you chose.

A: The whole plant is poisonous, yet contains amazing qualities. It contains a high percentage of monounsaturated fatty acids. Numerous studies have been carried out and published on the biological activities of *R. communis* plants. These activities are both due to the crude extract and its phytochemical compounds which can be of great interest in future for the development of plant-based complementary medicine. Presently, the properties of *R. communis* include antimicrobial, antifungal, anti- cancer, antidiabetic, anti-inflammatory, antimalarial, antioxidant, central analgesic, anticonvulsant, antinociceptive, anthelmintic, antifertility, laxative, uterine contracting, anti-implantation, anti- asthmatic, bone regeneration, molluscicidal, antiulcer, antihistamine, wound-healing, cytotoxic, insecticidal, anti-arthritic, antidandruff and hepatoprotective.

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Q: What Monograph are you working on?

A: I worked on *Ricinus communis*, more commonly known as Castor bean

Q: Who did you work with and what was the best thing about working with that person?

A: I wouldn't say we worked together, but I was motivated by Dr Katerere to research and produce a monograph of the species I chose.

Q: What challenges to you face with the collaboration?

A: None

Q: Why do you have such interest in this Species?

A: I chose this species for a course I was doing, and was curious about it as the oil used to be quite popular many years ago, but has lost its popularity somewhat. The plant is on the red list in South Africa, however you are able to grow it under special license, which has been trialed here. Its an interesting species as it does not need much attention and is fast growing with great yields from the seeds. The seeds produce about 80% oil, which depends on the growing conditions and climate

Q: What uses does it have and have you used it yourself?

A: Castor bean oil is very effective in treating skin problems like sunburn, acne, ringworm and wrinkles, fine lines and stretch marks.

It can also be used to disinfect wounds, as a hair growth treatment as well as a laxative when ingested. I have used Castor oil to stimulate hair growth. It's magic!

Q: What kind of research have you done into it?

A: I did a lot of research into castor oil because I failed to find a monograph that had enough information. I found a wide range of studies that have been done on the safety of the oil, as well as safest extraction methods and good farming practices.

Q: What are your thoughts on AfHP?

A: The AfHP is very exciting. It's essential for people to have a complete record of plants, their uses in order to create awareness of the positive and negative aspects as well as recording the traditional knowledge which has been passed down. It's also very exciting to have our very own Pharmacopoeia!

Q: In five years' time, what advances do you think this species would have made commercially and in research?

In India the species is farmed quite widely. One hopes that we can do the same in Africa, as in India growing castor bean plants has given communities an income and uplifted them. The popularity of the oil in cosmetic products is making a comeback and one hopes to see Africa benefit from this phenomenal plant.

[Castor oil plant - Wikipedia link](#)

A SHORT REVIEW BY RESHOKETSWE RIBISI AND YVONNE KUNATSA

Since time immemorial, plants have been used as viable alternatives for treating various ailments, including those that affect men. Such illnesses include some cancers, fertility challenges, and erectile dysfunction. In this short review, we will highlight some of the plants that can be used as interventions in select conditions that affect men.

Erectile dysfunction

The currant resin tree (*Ozoroa sphaerocarpa*), also known as **Monoko (Sepedi)** or **imfuce lemnyamma (IsiSwati)**, can be used to treat cases of erectile dysfunction. The bark of the plant is pounded and added to a soft porridge, which is then eaten. The resurrection plant (*Myrothamnus flabellifolius*) is also pounded, prior to taking it with warm water. This plant is also called **uvukakwabafile (isiZulu)**.



Above Left: Currant resin tree, Right: Resurrection plant

Infertility issues

The **watermelon** (*Citrillus lanatus*) comes in handy in dealing with low libido and reduced sperm count. The seeds from the fruit are used to prepare a soup that is half-cooked. The soup should be eaten on a regular basis. **Corn** (*Zea mays*) can also be used to treat general infertility issues in men. Two cups of the maize are pounded to form a powder, which is then mixed with palm wine. After filtration, a glass of the filtrate is taken twice every day.



Above Left: Watermelon, Right: Corn

Prostate cancer

It has become apparent that black-African males are at an increased risk for developing prostate cancer. Black males are also more likely to present with aggressive forms of the cancer and are even more likely to die from this cancer. It is believed that black males' genetic make-up is to blame for this.

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There are various African plants which are being used in patients with prostate cancer.

Carissa bispinosa locally known as **Morokolo**, is a shrub or small evergreen tree which may reach 4m high. This plant occurs naturally in hot, dry bushveld, coastal scrub and from low to medium altitude. It occurs across most of the South African provinces also occurs in Swaziland, central and slightly northern Mozambique, Botswana, and Namibia. It is of the *Apocynaceae* family, and the roots, leaves and fruits are used medicinally. These can be dried and crushed into a powder mixture.



Above Left: *Carissa bispinosa*,
Right: *Convolvulus sagittatus* Thumb

Convolvulus sagittatus Thumb, commonly known as **bindweed** is of the *Convolvulaceae* family. This plant is known as **Uvimbukhalo in isiZulu** and is widely spread across South Africa. The leaves, and aerial part of the plant are used to prepare alcohol-extracts which are taken orally.

Asparagus larycinus Burch, of the *Asparagaceae* family is called **Langbeenkatdoring in Afrikaans**. The plant bulb is boiled and ingested orally. This species is widespread across central and eastern South Africa. It also occurs in Namibia and Botswana.

African potato as it is widely known is of the *Hypoxidaceae* family. The scientific name is *Hypoxis hemerocallidea*. (Below)

This plant has been very much in the limelight during the past two decades. It occurs in open grassland and woodland and is widespread in South Africa in the eastern summer rainfall provinces (Eastern Cape, Free State, KwaZulu-Natal, Mpumalanga, Gauteng and Limpopo). It also occurs in Botswana, Lesotho and Swaziland. The corn is dried and boiled for drinking and commercial products are widely available in South Africa.



Above Left: *Asparagus larycinus* Burch
Right: *Hypoxis hemerocallidea*

From the *Solanaceae* family, two plants have been documented for use in prostate cancer. The leaves, fruit and stem of these plants are boiled and administered orally. *Solanum aculeastrum* is the topic of a proverb commonly used by the Batswana people, "O se bone thola borethe, teng ga yone goa baba". This means, what looks good on the outside may not be good on the inside. **Thola** as the plant is known in *Setswana* produces a fruit which is smooth and looks rather appetizing but is very bitter. It is no surprise it is also called bitterapple or poison apple.

Solanum nigrum, known also as **blackberry nightshade** was introduced to South Africa it is native to north-western Africa and Eurasia.



Above Left: *Solanum nigrum*

Right: *Solanum aculeastrum*

Gunnera perpensa which is also known as **wild rhubarb**, has been used not only for prostate cancer but also impotence. This plant is of the *Gunneraceae* family. The roots are powdered then boiled in water and ingested orally. The plant is widespread in tropical Africa from Sudan, Ethiopia, Democratic Republic of the Congo, Rwanda, Uganda, Kenya, Tanzania, Zimbabwe and Mozambique, extending-

along the central and eastern areas of southern Africa down to the Western Cape. The cape aloe, scientifically known as aloe ferox mill is indigenous to southern Africa. This plant is of the Asphodelaceae family. Aqueous leaf extracts of this plant are prepared and then ingested orally by patients,



Above Left: *Gunnera perpensa*

Right: Aloe ferox mill

References

1. Erhabor, J.O., Idu, M. and Udo, F.O., 2013. Ethnomedicinal survey of medicinal plants used in the treatment of male infertility among the IFA Nkari People of Ini Local Government area of Akwa Ibom State, Nigeria. Research Journal of Recent Sciences ISSN, 2277, p.2502.
2. Sebu, S.S. and Martin, J.P., 2013. Ethnobotanical survey of medicinal plants used by Bapedi traditional healers to treat erectile dysfunction in the Limpopo Province, South Africa. Journal of Medicinal Plants Research, 7(7), pp.349-357.

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OBITUARY BY
THE AAMPS EDITORIAL TEAM



Charles Wambebe who has died in the US was a Nigerian - born pharmacologist who did much to advance the recognition of African ethnopharmacology and traditional medicines.

He was the leader of the Nigerian team which discovered Niprisan, the only known drug discovered and developed in Africa to be registered by the US FDA. The drug is for sickle cell disease (SCD) which affects about 120 million people world wide of which one third are on the African continent.

SCD, which has no cure, causes much distress and greatly reduces the quality of life of many people of African descent.

Though never fully commercialized for various unfortunate reasons, Prof Wambebe was proud of this achievement which he said came through the efforts of a church pastor who approached him telling him that the cure had come to him through a dream.

He was himself a man of deep faith, and in latter life, a pastor and bishop of a church he co-founded and led.

Charles was also a major contributor and promoter of the African Herbal Pharmacopoeia and wrote several of the monographs that are contained in this book (www.aamps.org). He was also an active participant at the many consultative meetings and network events organised by the Association for African Medicinal Plants Standards (AAMPS) of which he was a leading member.

In 2017, Charles Wambebe took up a Professor emeritus position at the Tshwane University of Technology. At TUT he quickly made friends and was instrumental in mentoring postgraduate students and working with undergraduate students pro bono. He also made connections with the Traditional Healers' Organization (THO) then led by the late Phepsile Maseko (Thokoza!) who had a great deal of respect for the professor and created various opportunities for collaborations with him and with TUT. Sadly, she was lost in the delta wave of COVID in 2021.

He continued to consult for the WHO-Afro in the African Traditional Medicines arena working alongside such luminaries as Dr Ossy Kasilo, Prof Motlalepula Matsabisa, among others. He was one of the experts working on trial protocols for testing African herbal medicines for efficacy against the corona virus and use for management in COVID-19 disease. He had just left to join his wife in the US just before COVID-19. It was also during that time that he fell ill and had been struggling with ill health until his passing.

Charles helped WHO, AAMPS and the other organizations to forge links with many African scientists working in the field of African medicinal plants and herbal medicine not just in Nigeria but all over continent. Charles Wambebe will be missed by the African ethnobotanical and pharmacology fraternity and all those he worked with over a long and productive life. Former mentee Emmanuel Pavel who worked closely with Prof. Wambebe shares his eulogy below.

A HEARTFELT TRIBUTE TO PROF CHARLES WAMBEBE by Emmanuel Rubegeta Pavel Pretoria, South Africa

My father, my mentor, my friend. You call me, "my son" and I call you, "my dad". Such was our relationship.

I felt your passing away on the 10th of November 2022,



being the day of the research day in the faculty of Science, where I was about to give an oral presentation, and I became so afraid. I didn't know it was a sign of your goodbye. The man who hugely shaped my view on life, work, and many other things, had passed away.

Yes, you wouldn't have gone without telling me goodbye because you love me so much. And I love you so much. I've never met someone as equally impressive, smart and grounded as you. It is not that common at this stage of our careers to have professors who shape our intellect, interest, and life in general. But my mentor did that.

While we were originally brought together for academic purposes through Professor David Katerere, I soon began to learn from your views and perspectives and your wealth of knowledge. That will always be fundamental for my understanding of the world.

Your joy knew no bounds. I was always with you through these past five years. At school, at home, at church, I was always with you.

Teacher per excellence but also a student per excellence! A very simple man with remarkable humility. Your obedience to authorities is equal to none I have known.

I remember disagreeing with you on this on a certain occasion and you said, "If it is not against faith and morals, obedience to constituted authority is the greatest virtue of a servant of GOD".

I received your blessing some moments before your birth into eternal life. I am no longer shedding tears because you taught how to laugh in tears.

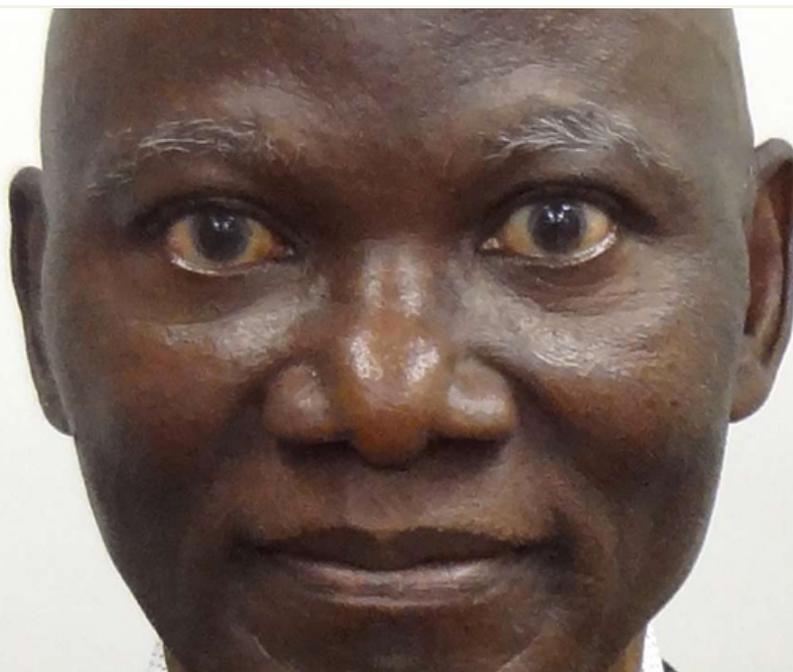
I am no longer weak because you taught how to be strong in weakness. You taught how to commend everything to God in prayer.

Now, all have been transformed into a hymn of love. You are always young in the heart and you will never grow old in my heart.

Adieu my dad, mentor and friend

Farewell Professor Charles
Wambebe.

May his soul rest in peace.



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BUSINESS CORNER

In the past year AAMPS featured a number of plant-based upcoming businesses in Africa and the USA. In this issue we recap on these businesses and the unique solutions and products that they provide.

Tell us whose products you have supported and provide us a product / service review.

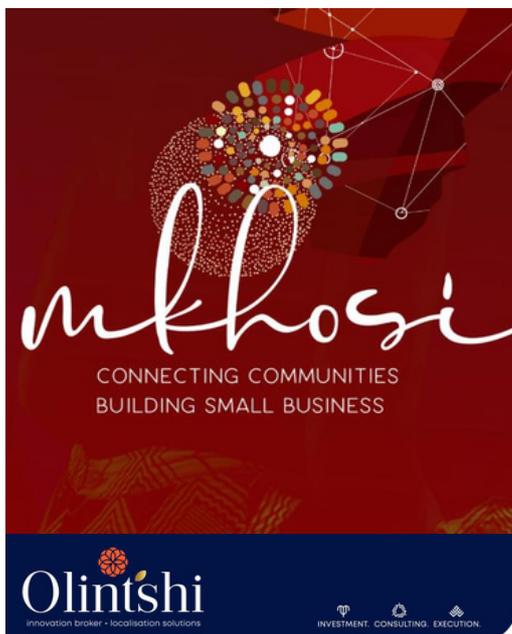


Built on the tenants of naturopathic medicine, our private practice is focused on life-style/functional/holistic medicine. In order to make a meaningful impact in the world and our lives, Sage ReStorative is all about enhancing wellness by focusing on holistic health, first prioritizing well-being in all its forms.



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We are passionate about African herbal teas and the health benefits these have, but we care more about the feelings and emotions that are evoked by African botanicals for African landscapes, people and traditions when drinking indigenous infusions.



africaninfusions

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We are a luxurious, vegan skin care brand. We offer products that address skin care problems faced by black women. We use our Seven Wonder oils from Southern Africa in the product line, and red tea, such as Yangu Oil, Marula Oil, Baobab Oil, Mangongo Oil and Moringa Oil.

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Local Village Foods sources indigenous African commodities and creates food product offerings for health-focused & socially-conscious consumers, starting in South Africa, but with ambitions to reach the African diaspora in US & European markets. Our range includes ancient grains, superfoods, gluten free flours, pastas, legumes, snacks, and beverages.



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Karen Swanepoel



Karen Swanepoel is a highly energetic person who has been instrumental in building the essential oils industry in Southern Africa.

Through an organization she founded, Southern African Essential Oils Producers' Association (SAEOPA), she and her team have managed to mobilize the support of the South African government, co-operating partners such as Swiss State Secretariat for Economic Affairs (SECO) Economic Development and Cooperation, and the United Nations Industrial Development Organisation (UNIDO) to assist in the strengthening the quality of essential and vegetable oil exports from the region.

Karen is also the Executive Director of SAEOPA, and has been involved in many industry studies in the field of essential oils since 2000.

She has lectured at various universities in subjects Botany, Bio-entrepreneurship, Biotechnology and Environmental Science. Karen has presented papers at IPUF (Indigenous Plant use Forum) since 2000 and on international level at WOCMAP (World Congress on Medicinal and Aromatic Plants), ISEO (International Society of Essential Oils), ASNAPP (Agribusiness in Sustainable Natural African Plant Product), Green Gold, SAAB (South African Association of Botanists), African Corp Science, Agricultural and Training World Conference, CHEMRAWN (Committee on Chemical Research Applied to World Needs), Industrial Crops and Rural Enterprises. She has also contributed to publications for the Department of Trade and Industry, Agriculture and Forestry and Acta Horticulturae.

Karen is a teacher by nature and a great inspiration to entrepreneurs in the sector.

In 'Meet the Legends', Prof David Katerere chats with Karen. Click the link below to watch the conversation.

[Watch the conversation](#)

Herb Drug Interactions – What Does the Latest Research Show? Held on Thursday 20 October, 2022

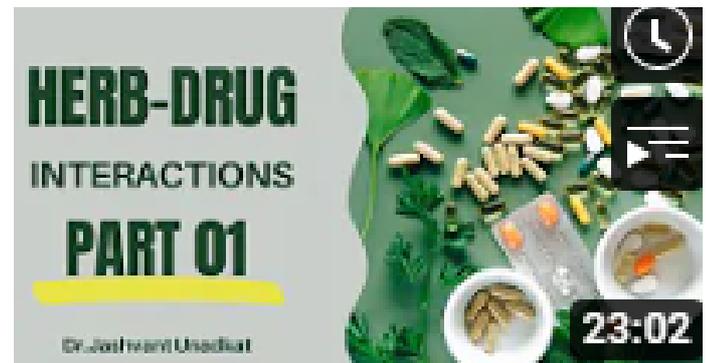
The use of botanically derived substances is increasing globally. While many of these products are used as medicines for treatment of diverse pathological conditions; others are used as dietary supplements, nutritional supplements, natural health products or novel foods.

According to a UNAIDS estimate, over 80% of Africans and one-third of the adults in developed countries use botanical products to treat or manage common ailments such as cold, inflammatory disorders, heart disease, diabetes, and central nervous system diseases.

Often such products are used concomitantly with over-the-counter medicines available without prescriptions and with prescribed medicines thereby creating a potential for herb drug interactions.

Interactions between botanical products to treat or manage common ailments such as cold, inflammatory disorders, heart disease, diabetes, and central nervous system diseases. Often such products are used concomitantly with over-the-counter medicines available without prescriptions and with prescribed medicines thereby creating a potential for herb drug interactions.

Interactions between botanical products and conventional drugs are frequently described in the medical literature based on studies using in vitro techniques. Herb-induced inhibition or induction of these pathways can alter the metabolism of drugs leading to adverse effects or lack of efficacy.



Watch the conversation

Speakers in this five-part conversation included **Dr Amy Roe** from The Procter & Gamble Company, **Prof Jash Unadkat** from the Department of Pharmaceutics, School of Pharmacy, University of Washington, **Prof John Clarke**, Department of Pharmaceutical Sciences, College of Pharmacy and Pharmaceutical Sciences Washington State University and **Victoria Oyanna**, Doctoral Student, among other key speakers.

The African continent is blessed with a vast variety of plant species and each country can be associated with a plant. AAMPS reflects on the countries highlighted during the year in our previous newsletter issues.

South Africa



Aloe Ferox, used to treat Malaria by oral ingestion or used to break down melanin on the skin when applied topically.

Zimbabwe



Coleochloa setifera used for the treatment of pneumonia (Photo by Mike Bingham).

Democratic Republic of Congo



Strophanthus Eminii (Emin's Strophanthus) – Flower of Emin's Strophanthus used as an anthelmintic and emetic.

Angola



Canarium schweinfurthii Engl. of the family, (Burseraceae) used to treat wounds and ulcers.

Malawi



Azadirachta indica (Neem). Medical uses stomach-ache, hypertension, diarrhoea, general body pain, headache.

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