Day 2: BioMoT session
19 September 2025

BioInnovation Monitoring Tool for South Africa

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19 September 2025

BioMoT

A species and market intelligence tool for public and private use supporting the SA biotrade sector

Tracking and learning from published scientific literature

frontiers | Frontiers in Pharmacology

TYPE Mini Review
PUBLISHED 18 February 2025
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- Keep sector informed
- Identify potential collaborators in academia
- Track potential "bad" news such as toxicity reports
- Enhances competitiveness

OPEN ACCESS

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Marula [*Sclerocarya birrea* (A. Rich.) Hochst.] products as a food and medicine

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antioxidants

MDPI

Review

Potential Impact of *Sclerocarya birrea* on Cardiovascular Health and Related Risk Factors: Review of Existing Evidence

Given R. Mashaba [1,*], Kabelo Mokgalaboni [2] and Sogolo L. Lebelo [2,*]

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Food Science & Nutrition

WILEY

Food Science & Nutrition Open Access

ORIGINAL ARTICLE OPEN ACCESS

Investigating the Nutritional and Sensory Potential of Selected Indigenous South African Fruits: Physicochemical Properties, Jam Production and Quality Evaluation

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FIGURE 1 | Photographs of indigenous fruit (Top) and their respective jams (Bottom) were used for consumer acceptance tests. Left to right: Num-num, Kei-apple, marula, stamvrug, and Natal apricot.

DRAFT

Marula Fruit Sector Development Plan - Current Ideas for 1 to 3-year Plan

Pillar	Notes of selected activities
Market Development & Promotion	• Establish partnerships, collaboration between local, regional and international companies • Cooperation with SIPPO, IPD
Sustainable Supply Chain Development	• Developing innovative solutions for ABS permits (including primary producers, farmers, harvesters, landowners as TK holders) • Resource assessments considering issues specific to Marula fruit selection, varieties, emerging quality requirements • Support to farmer groups to establish quality and reliable supply, scaling through agriculture • Conservation practices
Product Innovation & Development	• Collaboration between universities, incubators, SMMEs and industry to address current product challenges and develop potential as a superfruit, food and beverage ingredient, local products • Curation of latest science, IP information (BioMoT)
Quality, Standards & Regulatory Compliance	• Finalisation of EU NFR "master dossier" as basis for global market access and compliance for FBO members • Technical support to develop and operate Master Dossier model, ongoing compliance management • Establish and manage industry standards
Coordination, Governance & Investment	• Complete proposal with rationale for the "Food Business Operator" as an association, operating model • Launch FBO with board of directors • Raise funds to implement SDP and manage process • Establish M&E system linking to conservation, SDGs and KMGBF goals and targets, UNFCCC, jobs and other targets

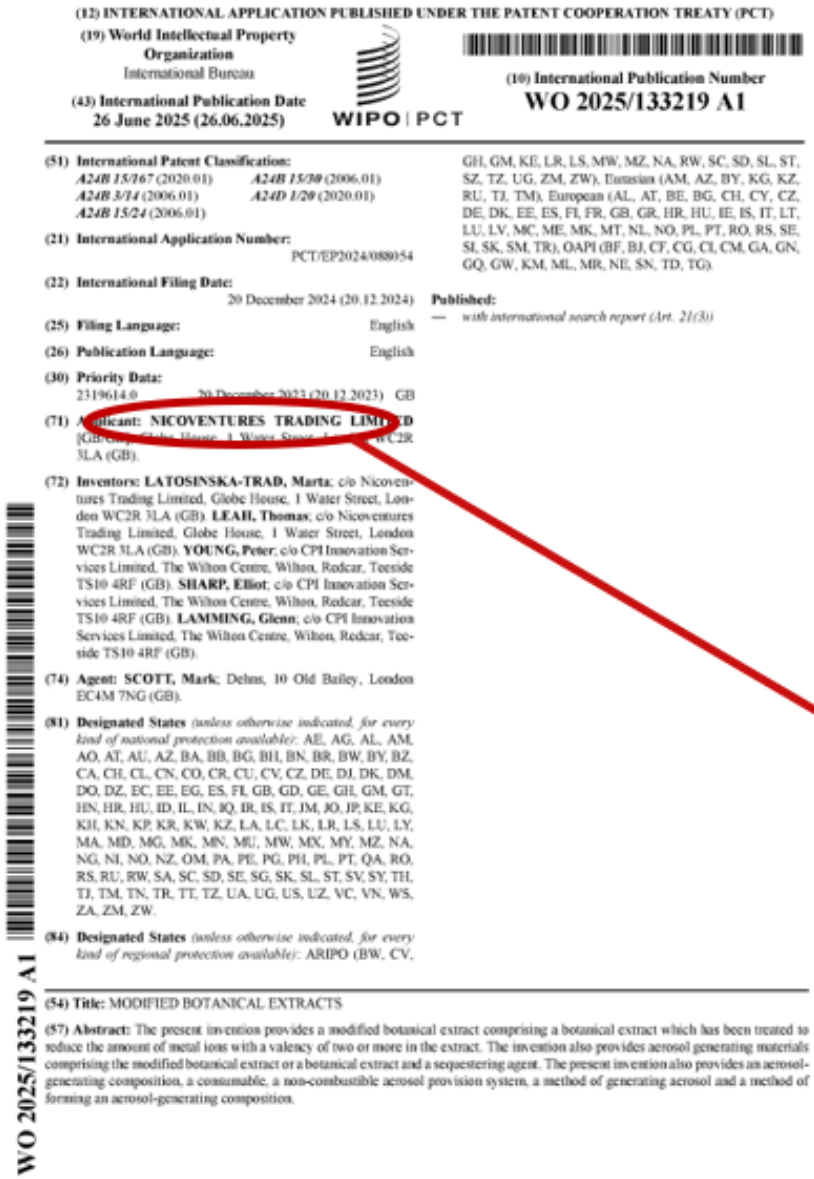
Essential for competitiveness

Tracking and learning for patents, enhancing competiveness

Selected Lens data to check how often there are changes: May and September 2025											
	26-May	30-May	1-Jun	3-Jun	10-Jun	13-Jun	18-Jun	26-Jun	1-Jul	18-Sep	Change in
Marula											16 weeks
Sclerocarya citations	407	408	408	408	408	408	408	408	409	415	8
Sclerocarya most recent patent	Colgate	Coreana	Coreana	Coreana	Colgate	Colgate	Colgate	Colgate	K18, Inc	Unilever	
Marula citations	1,429	1,433	1,433	1,433	1,437	1,438	1,438	1,439	1455	1,481	52
Marula most recent patent	Colgate	Evonik	Evonik	Evonik	Xampla	Conopco	Conopco	Henkel	CNRS	Acadian	
Baobab											0
Adansonia citations	825	826	826	826	827	828	828	830	831	840	15
Adansonia most recent patent	Aobiome	Samsung	Samsung	Samsung	Nestle	Conopco	Conopco	Monsanto	K18, Inc	BASF	
Baobab citations	2,719	2,724	2,724	2,724	2,733	2,740	2,740	2,761	2780	2,928	209
Baobab most recent patent	Nicoventures	Nicoventures	Nicoventures	Nicoventures	Virtue Labs	Nicoventures	Nicoventures	L'Oreal	Nicoventures	L'Oreal	
Ximenia											0
Ximenia citations	510	511	511	511	512	513	513	513	515	518	8
Ximenia most recent patent	Magoola	Bio Bee	Bio Bee	Bio Bee	Sapreme Tech	L'Oreal	L'Oreal	L'Oreal	L'Oreal	L'Oreal	
Tallow wood citations	23	23	23	23	23	23	23	23	23	25	2
Tallow wood most recent patent	Varotto	Varotto	Varotto	Varotto	Varotto	Varotto	Varotto	Varotto	Varotto	Unilin	
									Total	**Total**	**294**

Current estimate is that of these 294 patent applications 10-15 are relevant to the sectors. BioMoT has the potential to sort these out in automated reports.

„Formulation“ patents



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Published:
— *with international search report (Art. 21(3))*

(54) Title: MODIFIED BOTANICAL EXTRACTS

(57) Abstract: The present invention provides a modified botanical extract comprising a botanical extract which has been treated to reduce the amount of metal ions with a valency of two or more in the extract. The invention also provides aerosol generating materials comprising the modified botanical extract or a botanical extract and a sequestering agent. The present invention also provides an aerosol-generating composition, a consumable, a non-combustible aerosol provision system, a method of generating aerosol and a method of forming an aerosol-generating composition.

WO 2025/133219 A1

Baobab not mentioned in title, abstract or examples indicating baobab might not be central to the invention

Applicant is Nicoventures who we encountered with Honeybush and Rooibos vaping products

„Formulation“ patents

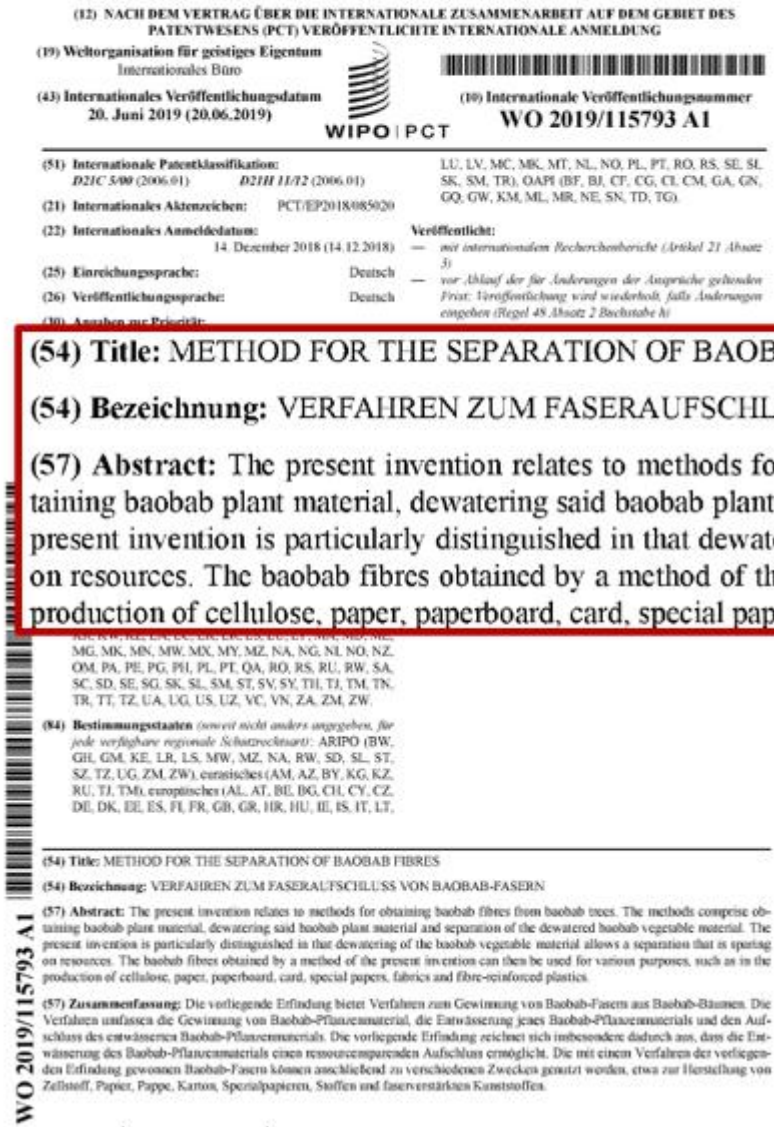
30 **Detailed Description**

Botanical extracts (also called plant extracts) are extracts of botanical (i.e. plant) material, such as tobacco. Such extracts can be formed simply by combining a solvent, such as water, with botanical or plant material. The botanical or plant
35 material may have been processed (e.g. by curing, cutting, etc.) after harvesting before formation of the extract.

As used herein, the term "botanical extract" includes an extract of any material derived from plants including, but not limited to, extracts, leaves, bark, fibres, stems, roots, seeds, flowers, fruits, pollen, husk, shells or the like. Alternatively, the botanical extract may comprise an active compound naturally existing in a botanical, obtained synthetically. Example botanicals are tobacco, eucalyptus, star anise, hemp, cocoa, cannabis, fennel, lemongrass, peppermint, spearmint, rooibos, chamomile, flax, ginger, ginkgo biloba, hazel, hibiscus, laurel, licorice (liquorice), matcha, mate, orange skin, papaya, rose, sage, tea such as green tea or black tea, thyme, clove, cinnamon, coffee, aniseed (anise), basil, bay leaves, cardamom, coriander, cumin, nutmeg, oregano, paprika, rosemary, saffron, lavender, lemon peel, mint, juniper, elderflower, vanilla, wintergreen, beefsteak plant, curcuma, turmeric, sandalwood, cilantro, bergamot, orange blossom, myrtle, cassis, valerian, pimento, mace, damien, marjoram, olive, lemon balm, lemon basil, chive, carvi, verbena, tarragon, geranium, mulberry, ginseng, theanine, theacrine, maca, ashwagandha, damiana, guarana, chlorophyll, baobab or any combination thereof. The mint may be chosen from the following mint varieties: Mentha Arventis, Mentha c.v.,Mentha niliaca, Mentha piperita, Mentha piperita citrata c.v.,Mentha piperita c.v, Mentha spicata crispa, Mentha cardifolia, Memtha longifolia, Mentha suaveolens variegata, Mentha pulegium, Mentha spicata c.v. and Mentha suaveolens.

One species amongst many

„Species specific“ patents



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— *mit internationalem Recherchenbericht (Artikel 21 Absatz 3)*
— *vor Ablauf der für Änderungen der Ansprüche geltenden Frist: Veröffentlichung wird wiederholt, falls Änderungen eingehen (Regel 48 Absatz 2 Buchstabe h)*

LU, LV, MC, MK, MT, NL, NO, PL, PT, RO, RS, SE, SI, SK, SM, TR), OAPI (BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, KM, ML, MR, NE, SN, TD, TG).

MG, MK, MN, MW, MX, MY, MZ, NA, NG, NI, NO, NZ, OM, PA, PE, PG, PH, PL, PT, QA, RO, RS, RU, RW, SA, SC, SD, SE, SG, SK, SL, SM, ST, SV, SY, TH, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, ZA, ZM, ZW.

(84) Bestimmungsstaaten *(soweit nicht anders angegeben, für jede verfügbare regionale Schutzrechtsart)*: ARIPO (BW, GH, GM, KE, LR, LS, MW, MZ, NA, RW, SD, SL, ST, SZ, TZ, UG, ZM, ZW), eurasisches (AM, AZ, BY, KG, KZ, RU, TJ, TM), europäisches (AL, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HR, HU, IE, IS, IT, LT,

(54) Title: METHOD FOR THE SEPARATION OF BAOBAB FIBRES

(54) Bezeichnung: VERFAHREN ZUM FASERAUFSCHLUSS VON BAOBAB-FASERN

(57) Abstract: The present invention relates to methods for obtaining baobab fibres from baobab trees. The methods comprise obtaining baobab plant material, dewatering said baobab plant material and separation of the dewatered baobab vegetable material. The present invention is particularly distinguished in that dewatering of the baobab vegetable material allows a separation that is sparing on resources. The baobab fibres obtained by a method of the present invention can then be used for various purposes, such as in the production of cellulose, paper, paperboard, card, special papers, fabrics and fibre-reinforced plastics.

(57) Zusammenfassung: Die vorliegende Erfindung bietet Verfahren zum Gewinnung von Baobab-Fasern aus Baobab-Bäumen. Die Verfahren umfassen die Gewinnung von Baobab-Pflanzenmaterial, die Entwässerung jenes Baobab-Pflanzenmaterials und den Aufschluss des entwässerten Baobab-Pflanzenmaterials. Die vorliegende Erfindung zeichnet sich insbesondere dadurch aus, dass die Entwässerung des Baobab-Pflanzenmaterials einen ressourcensparenden Aufschluss ermöglicht. Die mit einem Verfahren der vorliegenden Erfindung gewonnen Baobab-Fasern können anschließend zu verschiedenen Zwecken genutzt werden, etwa zur Herstellung von Zellstoff, Papier, Pappe, Karton, Spezialpapieren, Stoffen und faserverstärkten Kunststoffen.

WO 2019/115793 A1

(54) Title: METHOD FOR THE SEPARATION OF BAOBAB FIBRES

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(57) Abstract: The present invention relates to methods for obtaining baobab fibres from baobab trees. The methods comprise obtaining baobab plant material, dewatering said baobab plant material and separation of the dewatered baobab vegetable material. The present invention is particularly distinguished in that dewatering of the baobab vegetable material allows a separation that is sparing on resources. The baobab fibres obtained by a method of the present invention can then be used for various purposes, such as in the production of cellulose, paper, paperboard, card, special papers, fabrics and fibre-reinforced plastics.

Baobab in title, abstract, description, claims and examples indicating high specificity to Baobab

„Species specific“ patents

BIO INNOVATION AFRICA

Applicant = Hope Tree International

Applicant = Hope Tree International = Bao Packaging

BIOPRODUCTS ADVANCEMENT NETWORK · SOUTH AFRICA ·

Work with Core Group and One World Analytics to get BioMoT to identify the more species specific and other key elements identified from the “noise” of many formulation patents and others that are not highly relevant

Thank you for your attention

Special recognition is given to GIZ BIA who is funding the development of BioMoT

SANBI, represented by Neil Crouch is the public partner for this initiative

Cyril Lombard and Marthane Swart are contracted by BIA to support the initiative