# Why & How Ayurveda Approved Brand QuikHenna®, are Currently Best in the World?

Presented by

Mr. Vipin Goyal, Patent Formulator, Co-Founder, Pure Natural Products (PureNaturals.ltd) & Mr. Raujeev Dev, Herbalist & Adaptogen Expert (raujeev.com)

Knowledge paper presented by creator and application expert is brought to bring detailed information on creation of safest accelerator. Potent secret formulation using organically grown medicinal plants for combining in hair care & hair colouring products. Range now manufactured as part of proof of efficacy for seeking users and partners by company cofounded by passionate scion of Henna family, famously known as Mehndi-Wale.

## Exploring the Rich Heritage of Sojat & GI Henna: The Birthplace of Quick Henna™.

Earliest use of henna and its dye applications can be traced back to ancient Babylon and Egypt as mentioned in religious commentaries dating to Talmud. In India It was in prevalent use by the 4th century, which is evidenced in Hindu Scriptures written during that time and by the cave arts of Deccan region. It's find was shown as colouring laxative plant from Sub Sahara and South Asian deserts.

Sojat, a Village hamlet, now a bustling small town, part of Marwar region (erstwhile Jodhpur empire), located at start of the Thar desert, is situated on the left bank of the Sukri River, in Pali district, Rajasthan State of India. Ayurveda reference textbooks refer it as TamravatiNagri for colouring plants is blessed as an epicentre of tradition and innovation in Henna and Cumin.



Its geo location provides for best heat and rainwater to provide the best varieties of the **Lawsonia Inermis** plant, popularly known as Henna or Hina or Mehandi (famously know in Indian Languages). Mehndi grown at Sojat, is cultivated 100% naturally by rainwater, which naturally enhances the percentage of Colouring pigment "Lawsone". Sojat is the only region in India where more than 90% of Henna is grown and now exported worldwide.

The soil properties of Sojat region further adds to the Quality, Purity & Natural Dyeing ability of its Henna/ Mehndi. Bureau of Indian Standards (BIS), Product Quality standards issued by Government of India for ordinary mehndi, lawsone content should be 1.0. Whereas Sojat Mehndi's lawsone content is far better than the BIS minimum standards as it is more than 2.5. The high lawsone content has made it special and unique, in comparison to other varieties.

Varieties currently cultivated with bio modifications and improvements by us have consistently yielded,

- Longer Colour Retention.
- Excellent Natural Hair Conditioner.
- · An extraordinary Cooling Agent.
- Distinct aroma & long natural Shelf Life.
- Natural Deep Rich Reddish Colour.
- · Process worthy in dry and fresh conditions.



Continuous efforts of Farmers and Processors (Sojat Mehndi Kishan Samiti, Mehndi Vyapar Sangh Samiti & more), community efforts have helped Sojat Henna with the Geographical Indication (GI) Tag\* Status No. 372 filed under application number 628 by Government of India in 2021.

\*GI tag is a form of intellectual property, a certification given to certain goods or products which are unique to a geographical region. It is an integral part of the development which advances economic interests. These tags are a tool to protect the ownership rights on natural resources and manufactured goods. Products having GI tags prevent unauthorised use, provision of original species and in turn provide financial gain for farmer, producers through traditional sales to global markets.

### A Generational Affair

Sojat & Faridabad in India, has been a significant part of our story, being a leaf, where pluck and pick care is paramount for both quality and quantity. Traditional processor families from Faridabad have been involved in the cultivation, processing, and application promotion of the Lawsonia Inermis plant.



This traditional effort has been kept alive, for Five generations lead, Gupta-Goyal Family of our Co-Founder Mr. Vipin Goyal. Our mission of offering best was echoed by Mr. Vipin, who aimed to merge traditional plant attributes with modern scientific insights.

In 2016, next level exploration and innovation was initiated by him, where the secrets of Lawsonia Inermis, Cassia Angustifolia (Senna) and Cassia Obovata (Colourless Henna) were researched. His parental guidance and his zeal to contribute to his legacy kept him feeding it more.

Since Dec 2019, it was co boarding by Dr. Indu Taneja and Pure Naturals with French pharmacology and Art of Enfleurage, efforts moved in prophylactics as health curatives too. Acquired and Learnt from our past collaborators.

Aug. '2023, Approval and issuance by Ayurveda Authorities of India has helped us going more deeper to achieve the best of derivatives and final compound in Powder and Absolute liquid form for creation of Safest Hair Care range under direct supervision and charge of Mr. Vipin Goyal, Co-Founder and Executive Director at Pure Natural Products Private Limited.

#### The Research Phase

Vipin and our dedicated team embarked on field and lab research, meticulously studying the properties of Lawsonia Inermis and related plants like Cassia Obovata and Cassa Angustifolia. Their focus was on understanding the plant's API and Photosynthesis attributes. The goal here was not only to understand these attributes but also to harness their inherent potency and create a product that would address a variety of hair-related concerns, both cosmetic and therapeutic. It's very important to highlight notion vs research leading to under patent to best in hair Care and hair Colour.

## Quick Henna™: The Result of a Search & Research Journey

The result of this intense research and passion for plant science led to the creation of Quick Henna™, a proprietary blend that is deeply rooted in Ayurveda and Medicinal Plant Science. Our blends based on legacy knowledge and use cases mapped specific studies of liposomes on oxidative stress leading to excessive greying in current Al times.





**Unique Herbs for Quick Henna,** Nature, as minerals and plants has been a rich source of therapeutic agents for thousands of years and an

impressive number of modern drugs have been isolated from natural sources based on the uses of these plants in traditional medicine. Our efforts for development of proprietary formulae have been restricted to Henna, Senna Cousins, Indigo, Rosemary, Neem Ashwagandha, Moringa, Bhringraj and Manjishtha. Heritage herbs and our legacy understandings. It's the unique Henna (Lawsonia Inermis), Cassia Angustifolia (Senna), Cassia Auriculata (Avaram Senna), and Cassia Obovata (Colourless Henna), which bests QuikHenna® range in the hair care and colouring applications.





As is known to modern scientific researchers it's reactive oxygen species or free radicals, which are highly reactive molecules that directly damage cellular structural membranes, lipids, proteins, and DNA. Reactive oxygen species are generated by a multitude of endogenous and environmental challenges. Human body possesses endogenous defence mechanisms, such as antioxidative enzymes and non-enzymatic antioxidative molecules, protecting it from free radicals by reducing and neutralizing them. With age, the production of free radicals increases, while the endogenous defence mechanisms decrease. This imbalance leads to the progressive damage of cellular structures, resulting in the ageing phenotype. Ageing of hair manifests as decrease of melanocyte function or greving and decrease in hair production or alopecia. In Ayurveda text, its wellknown oxidative stress is pivotal mechanism contributing to hair greying and hair loss.

We developed a hair-follicle-selective macromolecule and small molecule targeting Quick Henna™ compound with topical application of phosphatidylcholine-based liposomes created by cassia plant enzymes. Liposome biosimilars created by our process -targets molecules to hair follicles, which can be double verified on human scalp in histoculture. Topical bio-similar delivery to hair follicles has best ability to provide faster safer colour hair with melanin. The delivery of the active Quick Henna™ blends to hair matrix cells and delivers proteins too.

Quick Henna™ has higher potential of providing large and small molecules, a selective hair follicle targeting. This molecular therapy with Quick Henna™ processed colourants and activators accelerates process to restore hair growth, physiologically restore and help in altering hair pigment, and to prevent hair loss.

The remarkable achievement of Quick Henna™ lies in two unique formulations, the first of its kind under Ayurveda, which have

been under patent registration with Indian IPR authorities.

#### Quick Henna™ Organic Gel™ Absolute Extract

The first formulation is the Quick Henna Absolute Extract, a fluid derived from a lab-controlled process. This fluid, blended into Organic Aloe Vera, serves as a functional food suitable for both oral and topical formulations.

#### Quick Henna™ Organic Gel™ Absolute

**Extract** ensures rich colour rendition post-colouring, making it an ideal choice for home or professional hair colourists. It also enhances scalp health and safety, providing APIs and lipids useful for hair fall, growth, quality, and colour maintenance.

#### Quick Henna™ Med Potent Powder Mix

The second formulation is Quick Henna Med Potent, where powder meets potency. This special blend features Indian Cassia as a dominant ingredient alongside Senna, creating a powerful mixture infused with oxidative and medicinal herbs.

Quick Henna™ Med Potent Mix acts as a natural adjuster and illuminizer for your natural hair, amplifying colouring properties, and offering nourishment and care for your hair locks.

#### The AYUSH Approval

All Quick Henna™ proprietary blends are AYUSH approved, ensuring quality and authenticity. These aqueous and powder organic compounds are crafted using specific ingredient ratios, under patent approvals, with the latest extraction methods. This process captures the essence of every ingredient while eliminating unwanted substances, ensuring purity and effectiveness.

#### The Magical Quick Henna™ Blend

What makes Quick Henna™ truly unique is its easyto-blend compound, allowing for the final Hair Care & Colour products to be manufactured simply by mixing with readily available natural additives. This approach respects each region's medicinal herb produce and complies with local FDA regulations. A proprietary magical potent blend that takes hair colouring to new heights. This powerful mixture features Indian Cassia as the dominant ingredient, complemented by Senna and infused with 13 oxidative and medicinal herbs. possesses an unparalleled ability to target hair follicles, delivering both large and small molecules through a selective targeting mechanism. This molecular therapy, combined with our expertly processed colorants and activators, accelerates the process of restoring hair growth, revitalizing hair pigment, and preventing hair loss - all without the need for unsafe chemicals.

With patented Quick Henna™ compound inside, we bring the safest hair care and hair colouring products under **QuikHenna®** to users worldwide, especially those suffering from allergies to harsh chemicals like PPD, Resorcinol, Ammonia, and Peroxide. Over 30% of the global population with greying hair is affected by these chemicals, and we aim to provide a pure natural alternative through Magical Quick Henna™.

#### **Overcoming Challenges**

Adopting eco-friendly and sustainable practices, hair colour products can minimize environmental footprint and contribute to a healthier planet. Our Hair colour products are made eco-friendly and sustainable through various measures as:

- Natural and Organic Ingredients: Utilizing natural and organic ingredients sourced sustainably. Ingredients such as plant extracts, minerals, and herbal dyes sourced by us offer a more environmentally friendly alternative to synthetic chemicals.
- 2. Biodegradable Packaging: All our hair colour products are in biodegradable and/ or recyclable materials reduces waste and minimizes environmental harm. Our opting for eco-friendly packaging materials like paper, cardboard, or bioplastics made from renewable resources helps mitigate the impact on the environment.
- Reduced Chemical Content: Our strength in patent formulation using fewer long-life preservatives, harsh chemicals and toxins not only benefits the user's health, also reduces the release of harmful substances into the environment during production and disposal.
- 4. Water Conservation: Our extraction processes during the manufacturing process helps conserve water resources. Additionally, we have designed our products with Aloe Vera Gel, best plant extracts for consumers. Our renowned applicares to use waterefficient methods when rinsing out hair colour further reduces water consumption.
- 5. Energy Efficiency: We plan to use energy-efficient practices in manufacturing facilities, such as using renewable energy sources or optimizing production processes to minimize energy usage and reduce the carbon footprint associated with our hair colour production.
- 6. Sustainable Sourcing: Our raw herbs and extracts sourcing and other raw materials ethically and sustainably ensures that natural resources are harvested responsibly by forest/ Village level Self Help Groups, without causing harm to ecosystems or depleting biodiversity. Our support to fair trade and organic farming practices contributes to the sustainability of our supply chain.
- 7. Cruelty-Free and Vegan Formulations: All our formulations are cruelty-free and vegan formulations, which means that hair colour products are not tested on animals and do not contain any animal-derived ingredients. This ethical approach has aligned us with sustainable principles and promotes compassion towards animals.
- 8. Product Longevity: Developing our long-lasting hair colour formulations reduces the frequency of application, leads to decreasing overall product consumption and waste generation. Though against our increased sales but continual research by our Founders has helped for enhanced durability ensures that reduced resources are utilized over time.

Our aim is to overcome growing logistics costs, shipping restrictions, and embargoes by adopting this innovative approach. While we may not be a factory to the world, our commitment to Ayurvedic innovation from India/ Bharat ensures that quality

and safety remain our top priorities with final blending at source/ mouth of consumption markets.

#### The Innovators

The innovation of Quick Henna™ is a result of the relentless efforts of Mr. Vipin Goyal, a 5th Gen. Family Henna Processor, Farmer, and Formulator, and Dr. Indu Taneja, a leading Gynecologist and Menopause Expert.

"Our mission is to blend traditional plant attributes with modern scientific insights to create a product that addresses a range of hair-related concerns, from cosmetic to therapeutic." - Mr. Vipin Goyal

In conclusion, the journey of Quick Henna from the rich heritage of Sojat Village to the world is a testament to the power of innovation, tradition, and the potential of Lawsonia Inermis, Senna Cassia Cousins and Indigo our blue dye plant.

#### Disclaimer:

This article is for informational purpose only. Quick Henna™ Organic Gel™ Absolute Extract & Quick Henna™ Med Potent Powder Mix is not a treatment for any disease or condition. Regarding side effects of herbal or plant extracts, these are generally safe when used on the skin or hair, but to ensure safety, it is best to do an allergy test or sensitivity test. Few cases, not exceeding 2~3% of users till now as mild erythema and papules as well as positive chronotropic effects are reported. Best is to consult your doctor before using it if for specific medical purposes. All our herbs used are rarely allergenic, we recommend always, do a patch test to ensure it's not going to react. Apply a small amount mixed with your chosen liquid to either the wrist or a patch behind the ears. If there is any redness or irritation, do not use it. If you live in "hard water" area (water with an enormous amount of minerals), hair may turn green due to mineral buildup it's recommended by our founders to do a strand test and always deep clean before using our formulations for best results.

#### References.

- International, Aroha (2017-10-01). "History, Origin & Cultural Significance of Henna". Aroha International. Retrieved 2021-05-27.
- Gozubuyuk, G. S.; Aktas, E.; Yigit, N. (2014-12-01). "An ancient plant Lawsonia inermis (henna): Determination of in vitro antifungal activity against dermatophytes species". Journal de MycologieMédicale. 24 (4): 313–318. doi:10.1016/j.mycmed.2014.07.002. ISSN 1156-5233. PMID 25442917.
- Mukkanna, Krishna Sumanth; Stone, Natalie M; Ingram, John R (2017-01-18). "Para-phenylenediamine allergy: current perspectives on diagnosis and management". Journal of Asthma and Allergy. 10: 9-15. doi:10.2147/JAA.S90265. ISSN 1178-6965. PMC 5261844. PMID 28176912.
- 4. Chaudhri, S. K.; Jain, N. K. (2009). "History of cosmetics". Asian Journal of
  - Pharmaceutics. **3** (3). <u>doi:10.22377/ajp.v3i3.260</u> (inactive 31 January 2024). <u>ISSN 1998-409X</u>.
  - 5. https://id.loc.gov/authorities/subjects/sh85060262.html
  - 6. https://www.wikidata.org/wiki/Q113333457
  - 7. https://www.fallingrain.com/world/IN/24/Sojat.html
  - 8. https://indiabiodiversity.org/species/show/32693
- https://en.wikipedia.org/wiki/Henna#:~:text=Henna%20is%20a%20bl ack%20dye,dyes%20from%20the%20henna%20plant.
- https://www.hollandandbarrett.com/the-health-hub/naturalbeauty/haircare/your-guide-to-colouring-hair-with-henna-benefitsdownsides-risks-andsteps/#:~:text=Henna%20has%20a%20pH%20of,between%209.0
  - steps:#:~:text=Henna%2Unas%2Ua%2UpH%2Uot,petween%2U9.U %20to%20and%2011.0.&text=This%20lower%20pH%20level%20( less,damage%20and%20hair%20fibre%20breakage.
- 11. https://www.nature.com/articles/s41598-019-47350x#:~:text=The%20responsible%20pigment%20for%20the,of%20the e%20leaves6%2C7.
- 12. https://www.rxlist.com/supplements/henna.htm#:~:text=Henna%20 is%20a%20plant.,%2C%20jaundice%2C%20and%20skin%20cond itions.
- https://www.hindustantimes.com/cities/lucknow-news/chemicalhenna-may-lead-to-skin-cancer-dermatologists-101665596629333.html#:~:text=She%20added%2C%20%E2%80

- %9CSeveral%20of%20the,is%20mixed%20with%20Sodium%20Pi cramate.
- 14. https://www.mehandi.com/Articles.asp?ID=417#:~:text=The%20op timal%20pH%20of%20henna,won't%20be%20the%20best.
- https://pubmed.ncbi.nlm.nih.gov/38010396/#:~:text=Lawsonia%20i nermis%20contains%20a%20variety,epicatechin%2C%20catechin %2C%20and%20quercetin.
- https://onlinelibrary.wiley.com/doi/full/10.1002/mba2.29#:~:text=La wsone%2C%20being%20an%20organic%20component,the%20hy brids%20(Figure%203A).
- https://www.mdpi.com/journal/plants/special issues/Plant Derivatives\_Pharmaceutical#:~:text=Plant%2Dderived%20compounds%20refer%20to,bioactive%20compounds%20with%20medicinal%20activity.
- 18. https://journals.innovareacademics.in/index.php/ijcpr/article/view/3 5695/20806#:~:text=Lawsonia%20inermis%20(Family%3A%20Lythraceae),4%2Dnaphthoguinone%20(lawsone).
- https://www.researchgate.net/figure/The-UV-vis-spectrum-oflawsone-in-PDB-and-chemical-structure-of-lawsone-Lawsonegives-an\_fig1\_316603940#:~:text=by%20Sajith%20Dananjaya-,The%20UV%E2%80%93vis%20spectrum%20of%20lawsone%20in%20PDB%20and%20chemical,spectrum%20band%20at%20453 %20nm.
  - 20. https://www.dubaihenna.com/2022/01/variety-of-henna-types/
  - 21. <a href="https://ec.europa.eu/health/scientific committees/consumer safety/docs/sccs\_o\_140.pdf">https://ec.europa.eu/health/scientific committees/consumer safety/docs/sccs\_o\_140.pdf</a>
- https://www.ncbi.nlm.nih.gov/pmc/articles/PMC5330104/#:~:text=T he%20content%20of%20lawsone%20in.g%20of%20dried%20crud e%20drug.
- 23. https://www.quora.com/Which-chemical-reaction-takes-place-when-we-apply-wet-mehndi-on-hands#:~:text=The%20leaves%20of%20the%20henna%20plant%20(Lawsonia%20inermis)%20contain%20lawsone.sold%20today%20is%20compound%20henna.
- 24. https://pubmed.ncbi.nlm.nih.gov/31811499/#:~:text=Lawsone%20i s%20a%20natural%20naphthoquinone.synthesis%20of%20variou s%20pharmaceutical%20compounds.
- 25. https://www.researchgate.net/figure/a-Chemical-structure-of-Henna-dye-b-Structures-of-the-main-components-of-Acacia fig2 344385463#:~:text=Lawsone%2C%20also%20known %20by%20its,%5B84%5D%20.%20...
  - 26. https://en.wikipedia.org/wiki/Lawsone#:~:text=Lawsone%20is %20a%201%2C4,hydroxyquinone%20containing%20one%20addit ional%20ring.&text=O%3DC(C(O,CC%3DC2)C1%3DO
- https://www.fda.gov/cosmetics/cosmetic-products/temporarytattoos-hennamehndi-and-black-henna-factsheet#:~:text=Henna%2C%20a%20coloring%20made%20from.ad ditive%20makes%20these%20products%20adulterated.
- 28. https://www.ncbi.nlm.nih.gov/pmc/articles/PMC7398001/#:~:text=l n%20general%2C%20extraction%20procedures%20include,%2C%20and%20microwave%2Dassisted%20extractions.
  - 29. https://pubmed.ncbi.nlm.nih.gov/19469940/
- 30. https://www.ema.europa.eu/en/medicines/herbal/sennae-folium#documents-section.