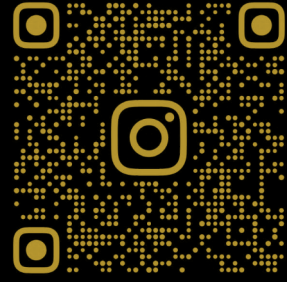




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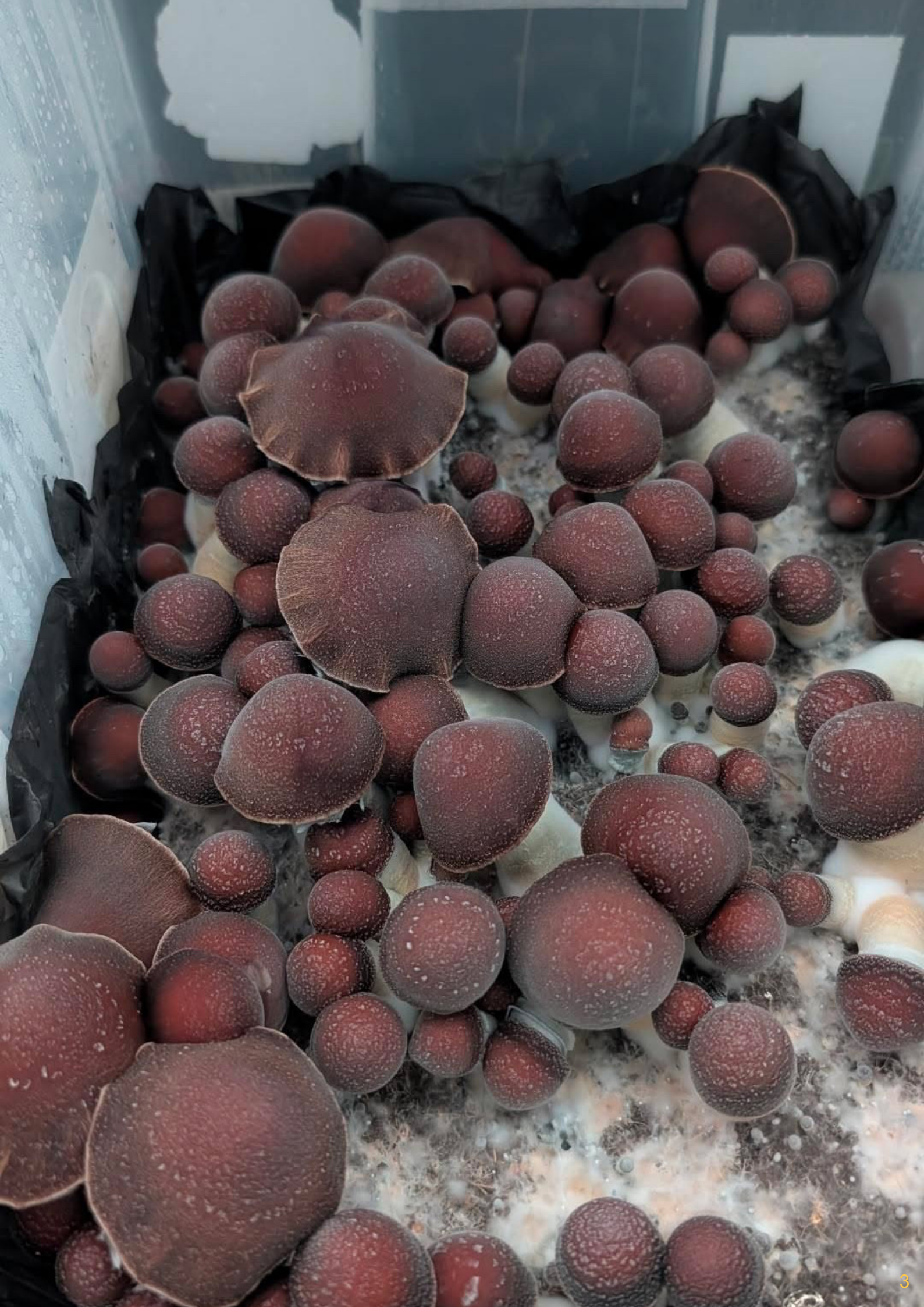
Choco Chips

By That is Ness-



@THAT IS NESS





Nebula

By That is Ness-





Beyond Psilocybin:

By Hyphal Mind -

Beyond Psilocybin: Exploring the Potential Entourage Effect

For quite some time, discussions surrounding the potency of psychedelic mushrooms have centered primarily on one compound: psilocybin. As the best-known psychoactive constituent of these mushrooms, psilocybin has understandably become the focus of modern clinical research and therapeutic development. But a mushroom is far more chemically complex than a single molecule.

Psilocybin producing fungi contains a diverse mixture of structurally related tryptamine alkaloids, many of which remain poorly understood. This raises a question that I believe deserves far more attention: Could the overall psychedelic experience be influenced not only by psilocybin and psilocin, but by the interaction of the mushroom's entire alkaloid profile? This idea is often described as the entourage effect.

The term originated in cannabis research, where it describes the hypothesis that multiple naturally occurring compounds may work together to produce effects that differ from those of isolated compounds alone. A similar idea is now being explored with psychedelic mushrooms. Rather than viewing psilocybin as the sole driver of the experience, researchers are investigating whether secondary alkaloids may contribute to differences in potency, duration, emotional tone, body sensations, or other aspects of the experience (Dinis-Oliveira, 2017; Lowe et al., 2021). From a scientific standpoint, in the research community this hypothesis remains unproven in humans, but the chemistry certainly gives us reason to keep asking the question.

Psilocybin Is Only One Piece of the Puzzle

Psilocybin is essentially a prodrug. After ingestion, it is dephosphorylated into psilocin, which interacts primarily with serotonin 5-HT_{2A} receptors and is responsible for much of the psychedelic experience (Collette, 2022). But psilocybin and psilocin are not alone. Commonly detected tryptamine alkaloids include baeocystin, norbaeocystin, norpsilocin, and aeruginascin. These compounds are structurally related, yet subtle chemical differences may alter how they are metabolized or interact with receptors.

Baeocystin, for example, was first isolated alongside psilocybin in the 1960s and is considered one of the principal secondary alkaloids found in numerous *Psilocybe* species (Leung & Paul, 1968). Norbaeocystin remains even less understood, while its dephosphorylated counterpart, norpsilocin, has attracted particular interest because laboratory research indicates substantial activity at serotonin receptors associated with psychedelic effects (Rakoczy, et al., 2024).

Aeruginascin adds another interesting piece to the puzzle. Historically associated with *Inocybe aeruginascens*, it has also been reported in other psilocybin-containing fungi. Anecdotal accounts have associated aeruginascin containing mushrooms with more euphoric experiences, although controlled human research has yet to establish whether aeruginascin is responsible (Lowe, 2021). Individually, we still have a lot to learn about these compounds. Collectively, we know even less.

Why Different Mushrooms May Feel Different

Anyone who has spent enough time around the mushroom community has probably heard it: *“This one is more visual.” “That species feels more emotional.” “This cultivar has a cleaner experience.”* These observations are anecdotal, and set, setting, expectation, dose, individual physiology, and many other factors can influence an experience. Still, analytical testing has shown that different species and even different specimens or cultivars within the same species can have noticeably different alkaloid profiles.

Two mushrooms could theoretically contain similar amounts of psilocybin while having very different concentrations of secondary alkaloids. If some of those compounds are pharmacologically active, then total psilocybin may not tell the entire story. That does not prove an entourage effect. But it gives us a scientifically reasonable reason to investigate whether the mushroom's overall chemical fingerprint contributes to the qualitative differences people consistently report.

Looking Beyond Total Psilocybin

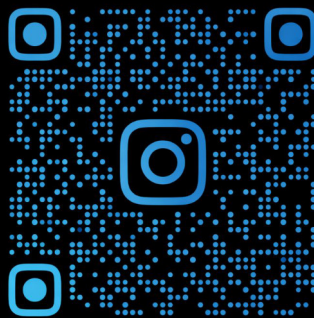
As analytical techniques improve, I believe focusing solely on psilocybin percentage will eventually become an incomplete way of describing these mushrooms. Instead of simply asking, *“How much psilocybin does it contain?”*, perhaps the more interesting question is: *“What is the complete alkaloid profile of this mushroom?”*. That distinction could prove every bit as important as total potency.

At present, we cannot say that psilocybin producing mushrooms definitively exhibit an entourage effect. What we *can* say is that these fungi contain a fascinating mixture of tryptamine alkaloids whose individual and combined pharmacology is only beginning to be understood. Psilocybin may be the star of the show, but that does not necessarily mean it is performing alone.

As psychedelic research continues to evolve, I believe one of the most interesting directions will be moving beyond just psilocybin and toward understanding the whole chemical fingerprint of the mushroom and what role that chemistry may play in shaping the experience.

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HYPHAL_MIND_3

Mescaline:

By Troy Brown AKA SonoranSpores -

Mescaline. Some people have heard of it and less have experienced it. Those who know if it typically associate it with the Peyote cactus, which is native to Mexico and very small portions of Texas. And of course, is outlawed by the US government due to its history of ceremonial and religious use by Native Americans.

However, there's an entirely different group of mescaline containing cacti that has also been ceremoniously used by the indigenous groups of Peru, Bolivia, and Ecuador for thousands of years. It's known as San Pedro, or as the indigenous shamans call it, Huachuma. And because its historical use stems from the Andean Mountains of South America, the US had no reason to ban it, making the plant completely legal to own. In fact, it's common in landscaping in the Southwest and California, frequently stocked in Home Depot and Wal-Mart.

There are 5 main species that are referred to as "San Pedro" and those are *Trichocereus pachanoi*, *peruvianus*, *bridgesii*, *scopulicola*, and *huanucoensis*. While the 5 species do have visual differences and slightly different care requirements, they are all exceptionally fast growing and can become massive. This is where they differ greatly from Peyote, which are extremely slow growing, small, button shaped cacti. San Pedro are columnar shaped and can double in size every year; mature stands hitting 30+ feet tall and 10+ feet wide.

I first got into growing San Pedro cacti in 2018. I knew a little about Peyote, but basically the bare minimum- you eat the cactus, and you trip balls in the middle of the desert. At this time, I was going down mycology rabbit holes learning all I could about mushrooms. It was in these mycelia filled depths that I began to read more and more about mescaline and more specifically, San Pedro cactus. Living in Arizona, I just knew I had to get my hands on some (for preservation and ornamental purposes only, of course).

But the thing was, in 2018 it was kind of hard to source legit San Pedro. Googling "San Pedro cactus for sale" basically turned up nothing except a couple OfferUp listings. So that's how I got my collection started- from some dude in California selling *Trichocereus pachanoi* cuttings on OfferUp. I knew it was going to be a fun endeavor, but from the moment I first opened that box and planted the cutting I was absolutely hooked.

I started to find more and more people selling San Pedro, mainly from word of mouth and finding niche forums. My one cactus quickly turned to 3. Then to 10. Then to 15. And soon my entire apartment was overrun. And this was all before I had experienced what all the hype was about. The main issue was I didn't want to cut any of my cacti in order to try them- they were too beautiful and I wanted to see them thrive and get big!

Reading about other peoples' encounters with the cactus made San Pedro all the more intriguing to me. Anecdotes like the boundaries of one's body completely dissolving, feelings of soaring like an eagle through mountain peaks, sensations of one's heart levitating above their body with love, the soul and inner-consciousness flying free. The more stories you read or hear about San Pedro and mescaline, the more you begin to understand the medicinal power of this plant.

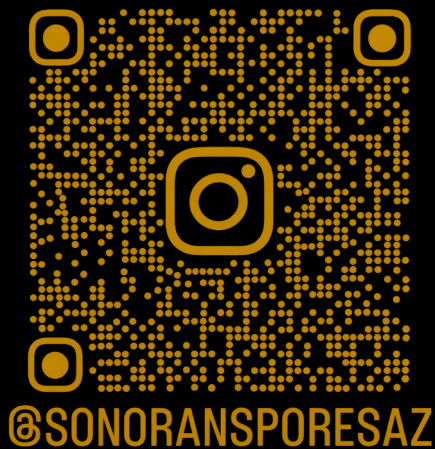
I could go on and on until I'm blue in the face about the incredible experiences of enlightenment and how fascinating these organisms are. But for the sake of your time, I'll wrap it up here.

In my personal experience, growing San Pedro cacti has completely changed my life. It allowed me to go deeper into myself and discover things I did not know were there (*especially* when paired with my mycology research). This journey inward has been completely unique and different from any other plant medicine I've worked with. I hope this encourages you to either start or to continue your own inward journey and start discovering how these magnificent cacti can help you along the way!

Disclaimer

Sonoran Spores does not endorse, encourage, or condone the cultivation, possession, distribution, or use of mescaline or any other controlled substance. Any information provided in this article is presented for educational and informational purposes only and should not be interpreted as an instruction, recommendation, or encouragement to cultivate, extract, prepare, possess, or consume mescaline-containing substances.

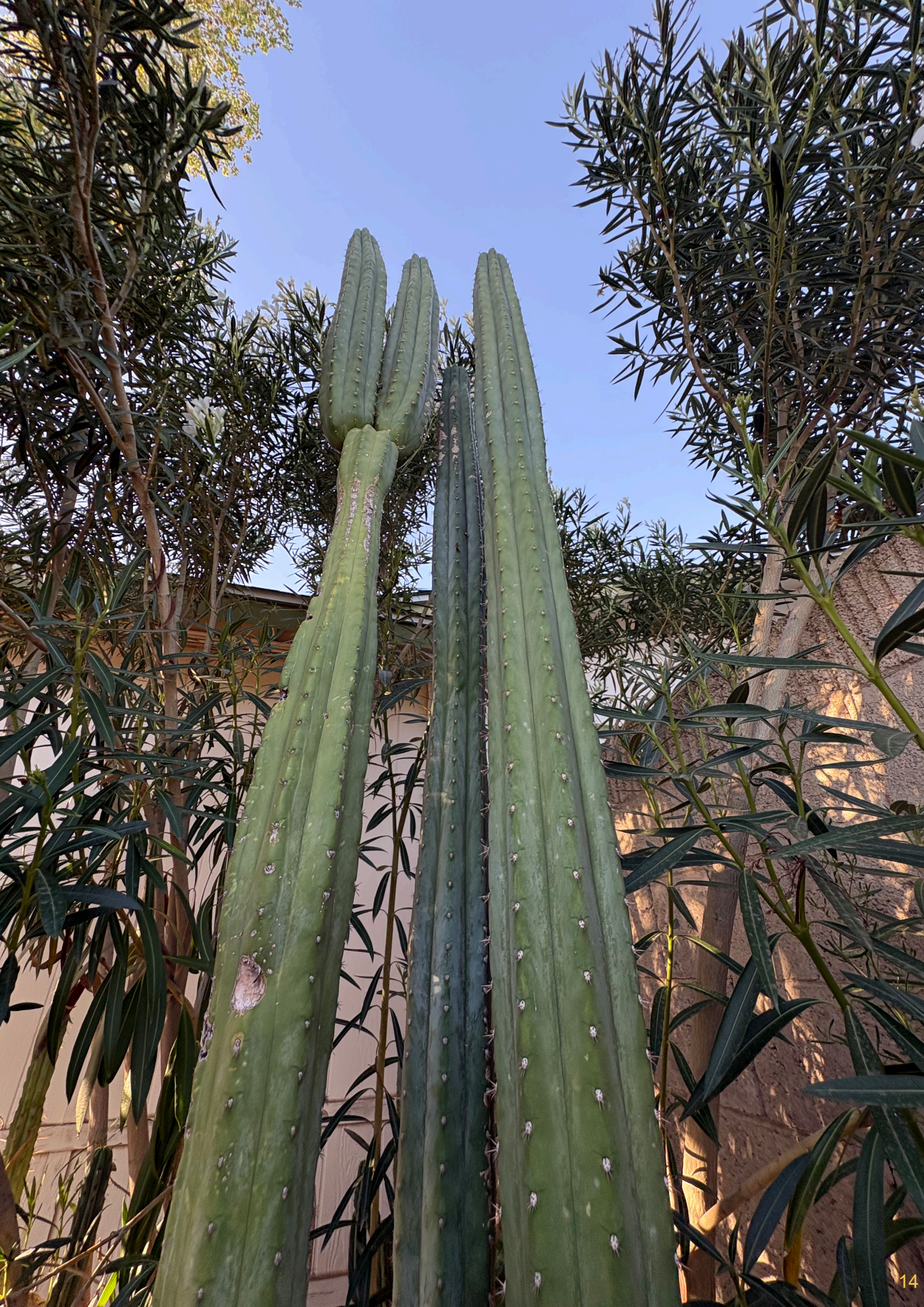
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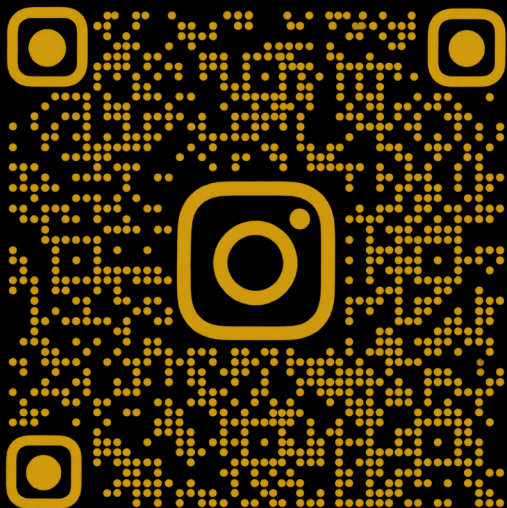






Dreadmaw

By MushrealmACS



@MUSHREALMACS







Rooted in the Clouds: The Search for *Psilocybe neoxalapensis*

-BY Roger O'Muircheartaigh

Hello, I am Roger O'Muircheartaigh, an Irish taxonomist. (some.guysfungi on Instagram)

I specialize in fungi in cloud rainforests- forests that are at an altitude of 1200m-2500m above sea level that receives more than 2000mm of rainfall per year. These forests are often full of valleys that are full of fog & mist, and these areas specifically are my specialty. In 2017 I made my first trip to Mexico, to the states of Oaxaca and Veracruz. I was specifically looking for species that have a characteristic known as a “pseudorhiza” which is a long tap root attached to the base of a stipe on a mushroom.

I was curious about these species of mushrooms that had this characteristic-and it let me more into the Genus *Phaeocollybia*. I wondered if a mushroom not only had deeply rooted mycelium, but also the fruit body itself was resilient enough to grow 16cm (6 inches) underground...how can those species and their mycelium be used for mycoremediation and other techniques to clean up soils and regenerate lagging parts of nature. The search for that species led me to find a (at one time) a very little-known cloud rainforest species known as *Psilocybe Neoxalapensis*. One day I was in a valley, channeling my inner goat spirit, climbing along *dangerous* inclined embankments photographing the tiny fungi that grow on mossy embankments, I found a species of *Phaeocollybia* that I had never seen before. It was about 8cm big, with a conical jet-black pileus, a smooth red stipe (different from *Ps. Neoxalapensis*) and burnt orange gills (orange spores as well, which are different from the species *Ps. Neoxalapensis* having purple/black spores). Upon collecting my very first specimen of this species I noticed it had a pseudorhiza that was around 5cm (2 inches) long. Finding this specimen- my very first of the species led me to returning to this same valley WEEKLY over the course of 8 years, and I still visit this exact same place to this very day.

The next week I returned to the same area and was on the lookout for other species that share similar characteristics, until I came across a species that looked nearly identical to the *Phaeocollybia* (still undescribed) but had very macro differences I noticed immediately.

The stipe wasn't as smooth- but had the typical *Psilocybe* fibers growing on it. The gills as well were ranging from grey to purple/black and the specimen itself had a distinct "sour & farinaceous" smell to it- reoccurring qualities in the genus *Psilocybe*. I went to collect the specimen and noticed it was very tough to get out of the moss. I wiggled the specimen around in a circle and upon collecting this species ALSO had a pseudorhiza...yet was over 16cm long! I was extremely excited by this find and went home immediately and looked at the specimen under the microscope, checking spore shape/size and looking around at the pseudorhiza as well. I couldn't find much information on **whatever** species this was. I checked google lens just for "shits n giggles" (obviously not recommended) and looked at a few old micrographs & research papers from Mexican taxonomist Dr. Gaston Guzman. Upon reading more into his work I was reading about the section *Cordispora* and how studying the cystidia of the species would further help me identify what species I had found.

That night I had posted the observation (without obscuring the location) to INaturalist (very much recommended) and had a comment and a message from Mycologist/Taxonomist Alan Rockefeller from the USA. He proposed the idea of the species I had found to be *Psilocybe Neoxalapensis*. He had told me the species was extremely rare and little known to the mycology community and persuaded me to collect spores and sell them to other mycologists. That is the start of my journey with this incredible species. Since 2017-2018 I have returned to Veracruz for the fungi season June-November, and *Psilocybe Neoxalapensis* is always within meters of me in whichever forest I wander in. I may make it seem like the species is common and/or everywhere ...by the number of times I post photos of them but trust me- they are quite difficult to find-and DANGEROUS! I utilize most of my time in the forests working more with the genus *Mycenae* & bioluminescent species but also enjoying spending time photographing all species in the genus *Psilocybe* as well- as they seem to be a favored genus amongst the majority. I have had the pleasure of observing this species in clusters of 3-4 but 95% of the time they are solitary species, growing on embankments along steep dropoffs to about 20-30 meters. It's quite nerve wracking to photograph them with a cell phone...even more so with a tripod and the idea to focus stack multiple photos to capture the true beauty of this species

The more time I spent in the cloud rainforests the more I understood how THREATENED they truly are. Mexican laws (to be fair, most of the world) doesn't prioritize our forests and fauna above money and industrialism. Year after year, more parts of the cloud rainforest are destroyed to make more room for shops, houses, coffee plantations (I love coffee but I'm against this) and more so government bought land for agricultural projects. I have even witnessed firsthand deforestation by human made wildfires (government coups to buy burnt land cheaper). Year after year I return to spots I hold near and dear to me to see more destruction in and or around these areas due to government negligence and careless behavior by the locals. At first, I was also extremely naïve with posting the exact coordinates of the locations on INaturalist, which has led to 1st world tourists visiting these areas, bringing attention to these areas and resulting in the local communities "tidying" up the areas for more tourism (cutting down moss embankments to create wider paths for walking, and destroying parts of the forests to put up fences or rails for more safety). Since then, I have still posted on INaturalist to help map the distribution of species, to help contribute to the platform on identifying fungi and helping understand more about their widespread/seasons but I have been more cautious about obscuring the exact location. We just cant have nice things it seems like....

Year after year I have the pleasure of observing this species and they are always so photogenic for me. It truly seems like everywhere I go, this incredible *Psilocybe* species is just a few meters away, begging for me to spend some time with it. It's quite a precious species. I have no background in anthropology, but I think the curiosity comes from traveling. I have done my due diligence and have spoken to locals from both states Oaxaca & Veracruz about historical ritualistic use of this specific species and Ive come to understand majority of Veracruz has no idea of this species and little to no historic use of them. In Oaxaca they did have a name for the species, a broad nickname known as "*pájaritos del monte*" which means "little birds of the mountain". I believe the use of the genus *Psilocybe* is more common in Oaxaca than in Veracruz, that's not to say they don't love their mushrooms in Veracruz because there IS an incredible community of edible fungi lovers...just not so much *Psilocybes*. The people of Oaxaca expressed knowledge of *Psilocybe Neoxalpanesis* but I concluded that there are other species that were more commonly used, species that were more commonly found and species that grew in abundance like the *Section Zapotecorum*. To this day, from my side-missions including interviewing average "fungi lovers" of the regions, to speaking with shamans and from comparing my evidence to opinions from mycologists







The Mycologist & The Mathematician

-By Harry Packart

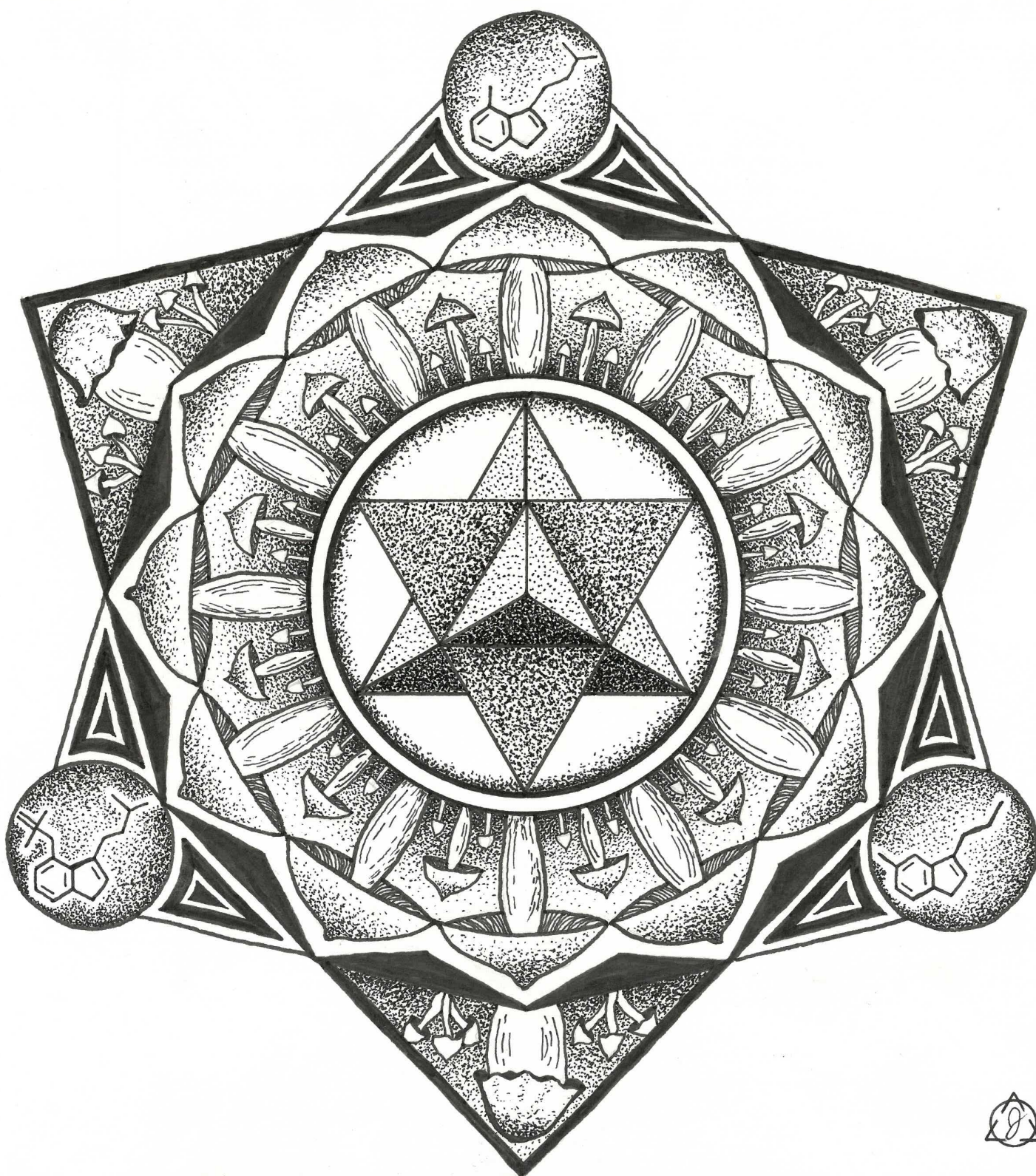




Fruit Of The Gods

-By Jarrod Naylor





Jarrood is a truly talented artist, a great friend and a loving father. If your interested in having a commission done or just supporting his art and supporting something worthy tap in and scan the QR code on the previous page.
-Wade

The Dynamics of Fungi Dispersal

By Caine Barlow -

Fungi are certainly not static organisms; while we may see them as part of the soil or the decaying logs on which they subsist, this view is a biological illusion. Our short lives and the limitations of our perception mean we don't get to see the full reality of the fungal lifestyle in their multiplicitous variations: most of the lifecycle of any given fungus is all but invisible. We know about most mechanisms, such as spore dispersal and germination, as well as the slow elongation of mycelium. We discuss how fungi play a numbers game in terms of mating compatibility. But fungi are otherwise silent, slowly decomposing, throwing out the odd mushroom, or cluster! Every time we find a mushroom, there is a sense of privilege to have been the one lucky enough to come across it.

In their ineffable silence, **Funga** represent one of the most mobile groups of organisms on Earth. From microscopic spores drifting in the air around us to the slow, relentless expansion of underground mycelial networks, fungi have evolved a suite of dispersal mechanisms that allow them to colonize every corner of the globe and every niche therein. The distribution of fungal taxa is influenced primarily by ecological factors: soil type, vegetation, and climate; more recently, human activity and practices such as agriculture and trade. But the story is far, far older, and one yet to be written! A story of geographical barriers, ring species, and evolution in the face of constantly changing climates.

Psilocybe, it has been hypothesized, emerged from the detritus of an extinction event 65 Mya; imagine a dank, dark world of fallen trees, supporting arthropods, insects, small mammals, and a plethora of fungi. A wonderland for the lignicolous. The genus *Psilocybe* has, over the millennia, hitched rides on moving continents, hijacked a variety of habitats, and spread across the planet. Their lightweight spores dispersed by wind and water, and by an ever-expanding cacophony of organisms that feed on mushrooms, allowing them, over time, to colonize diverse habitats such as soil, humus, dung, wood debris, mosses, and refuse.

But human activity and agriculture have led to the advancement of many species in ways never seen before. Species such as *Psilocybe cubensis* were likely introduced to the Americas during the Spanish conquest in the 16th and 17th centuries. It is thought cattle brought from India via Africa during colonization provided the dung-rich environments for coprophilous species to thrive; how many other species traveled via similar routes? *Psilocybe cubensis* has been identified under a variety of names on several continents on separate occasions. *Psilocybe semilanceata* has a widespread distribution across temperate regions, including Europe, Tasmania, and North and South America, and is spread by herbivores that graze the grass on which

it grows. Similarly, *Psilocybe mexicana* is said to spread to meadows where horses have been pastured.



Figure 1. *Aseroe rubra*, growing in a garden on the edge of native forest, Dover, Tasmania

In 1772, a French expedition searching for the missing explorer Jean-François de Galaup, comte de Lapérouse, encountered southern Tasmania. One of the expedition's exceptional finds, made by botanist Jacques Labillardière on May 1, 1792, at Recherche Bay, was the alien-looking *Aseroe rubra*; Labillardière published his account of it in 1800. The fungus was recorded at Kew Gardens, just outside London, in 1828, only a couple of decades later! How does a mysterious fungus travel from one side of the planet to the other in a little over 30 years? Fungi, it seems, are quick to take advantage of mammals, their ability to travel, and desire to collect and categorize!



Figure 2. The global distribution of *Aseroe rubra*. Source: iNaturalist, accessed 19/08/2026

The alien *Aseroe rubra* is quietly on track to take over the gardens and jungles of the world!



Figure 3. *Leratiomyces ceres* (syn. *Psilocybe ceres*, *Stropharia aurantiaca*), growing in urban woodchip mulch in restoration plantings, Clifton Hill, Victoria.

Another weedy fungus, *Leratiomyces ceres* (formerly *Psilocybe ceres* and *Stropharia aurantiaca*, the common chip cherry), has hitchhiked from Australia to other parts of the world. It was first collected in Melbourne, Australia, in 1887. It was first recorded in Somerset, UK, in 1957 and has now spread throughout southern Britain and into continental Europe. The fungus is thought to have appeared on the West Coast of North America (from coastal California to British Columbia) probably after 1951. Bridge et al. (2008) demonstrated that *Psilocybe ceres* and *Stropharia aurantiaca* were conspecific with *Leratiomyces ceres*, and therefore synonymous.



Figure 4. The global distribution of *Leratiomyces ceres* - regarded as invasive! Source: iNaturalist, accessed 19/08/2026

The invention of the Wardian Case in 1829 by Nathaniel Bagshaw Ward, a sealed glass greenhouse, enabled the shipment of live plants during long multi-month ocean voyages. Before then, it was almost impossible to ship live plants in bulk; exposure to saltwater and harsh weather made it near impossible to ensure survival. The Wardian case revolutionized the ability for botanists and a growing number of horticulturalists trading in rare plants to ship specimens internationally - avid collectors were paying a small fortune for rare trees or plants, and many were happy to oblige their whims. Trees weren't the only organisms being traded! Fungi, insects, and other plants traveled alongside.

The fact that fungi do travel widely is likewise evidenced by the spread of a variety of common European species. Over the centuries, many fungal genera have traveled vast distances from Europe: *Agaricus*, *Laccarius*, *Amanita*, and *Suillus* all crept in, hidden or not so hidden, on the root tips of seedlings intended for gardens or commerce. But it seems regardless of the destination, the duff and detritus supporting the plants and their mycorrhizae can also support a variety of other fungi, with many species traveling silently and less visibly between the great gardens of the 19th century.

The examples cited above are only two of many! In a world that is rapidly growing smaller, how can we track how fungi travel? How can we dig deeper into how populations within these species move and the gene flow between them? We can build phylogenetic trees and infer relationships; we can track observations over time and infer changes in distribution, but we are currently limited in our ability to detect genetic movement. This is also somewhat compromised by the belief that some things are native to a region; their introduction may not be recent, but having enough time for species to intrude into indigenous cultural practices.

Psilocybe cyanescens was formally described in 1946 by British mycologist Elise Wakefield. Wakefield had been making collections in the woodland areas of Kew Gardens since 1910, the tone of her description suggesting she knew it was foreign. The species provides a good case study for anthropogenically driven dispersal, Kew Gardens having served as a major node in the international botanical trade since the 1700s, consequently becoming a perfect, albeit unintentional, entry point for exotic fungi. Wakefield's long-term documentation of *P. cyanescens* not only highlights its entry in the UK but also underscores the broader pattern of 'weedy taxa' that, like *Aseroe rubra*, quietly integrated themselves into human-disturbed landscapes far from their native range.

Psilocybe azurescens provides another striking example of anthropogenic dispersal, specifically through the introduction of European Marram grass (*Ammophila arenaria*) to the Pacific Northwest. In the early 20th century, this grass was widely planted near Astoria, Oregon, to stabilize coastal dunes; its use along the San Francisco coast had already proven successful. This introduction event and subsequent environmental modification created a specialized, disturbed habitat that the species

rapidly colonized. Much like Wakefield's long-term documentation of *P. cyanescens*, the emergence of *P. azurescens* provides us with an example of how the intentional movement of plant species can inadvertently facilitate the spread of fungi into new regions. The question remains: what was the origin of *P. azurescens*? Neither *P. cyanescens* nor *P. azurescens* are known to exist in native habitats!

The uncertain origins of species such as *P. azurescens* and *P. cyanescens* highlight a growing disconnect between our ecological observations and our taxonomy. We are increasingly identifying new species that may be inherently plastic, both in taxonomy and in barcoding region, while globally mobile. In the past, our classification system has typically recognized static, geographically isolated organisms; *Psilocybe cubensis* and its numerous names are a case in point. This becomes most apparent when we examine the taxonomic legacy of Gastón Guzmán. While his monograph, *The Genus Psilocybe*, was monumental, his taxonomy was somewhat dogmatic, with very specific species concepts that relied on features as subtle as minor variations in spore size. Guzman seems, in retrospect, somewhat naive about species with wide phenotypic variation, creating species where no boundaries actually exist, while somehow conflating species from different genera.

Molecular techniques offer us a lens to better observe the movement of populations and phenotypes, potentially allowing us to observe the gene flow between populations that were once isolated but are now being reunited by human agency. This necessitates a shift away from the dogmatic, morphology-based species concepts of the past, specifically those in the legacy of Gastón Guzmán, toward a system that embraces the reality of global fungal movement.

Wakefield's documentation of *P. cyanescens* over the decades offers more than just a cursory account of an unusual species; it allows us the opportunity to assess the limitations of our current classification systems. These weedy taxa are inherently plastic, rapidly adapting to the anthropogenic landscapes we create for them. They do not behave like the static, geographically isolated entities that our traditional taxonomy was originally designed to catalog. Instead, they are dynamic, mobile, and morphologically variable.



Figure 5. Piles of woodchips ready to be spread as woodchip mulch in restoration plantings, Clifton Hill, Victoria

While we may recognize that many species appear to be endemic to specific regions because of their unique ecological requirements, the fact that they readily spread over long distances when exposed to widely distributed substrates may call into question their true origin. While the 19th-century botanical trade laid the foundation for global fungal dispersal, modern horticulture has further accelerated this process. The horticultural use of wood chips in garden beds has enabled fungi to flourish in new ways. The mulched woodchip bed, typically spread from a central woodchip pile and often built up from previous piles, provides fungi with a ready means of dispersal. Modern landscaping and gardening practices are unintentionally spreading many species.



Figure 6. Records of *Psilocybe* spp. with associated genetic data. A global genus, underrepresented genetically. Source: iNaturalist, accessed 20/08/2026

The citizen science community on platforms like iNaturalist has revolutionized our ability to track species distributions, but this data is not neutral. By mapping *Psilocybe* observations, highlighting those with genetic data we reveal a cultural bias, with observations heavily clustered within nations characterized by high socioeconomic stability and widespread access to digital technology. This skew is further compounded by the legal landscape surrounding mycological research (especially *Psilocybe*); in regions where collection is treated with leniency, observational data flourishes. Conversely, in other parts of the globe, the records remain conspicuously sparse. Our global map of *Psilocybe* distribution often reflects the geography of global wealth and legal tolerance as much as the true biological range of the genus.

The trend of “knocking”, of spreading fungi to new parks, cities, between states, or cross-country, makes this opportunity less viable, as separate populations are brought together and new genes are likely reintroduced. “Pot plant” fungi found in nurseries highlights how horticultural industries existing between nations, may obfuscate the appearance of otherwise undescribed species, yet to be described from their country of origin.

A point often discussed is that many introduced species, including several *Psilocybe* species, are found only in disturbed ecosystems, planted garden beds, but very rarely in undisturbed native ecosystems. Bridge et al. (2008) points out that 250 species of fungi have adapted to woodchip mulch. This observation leads to an uncomfortable but necessary question, especially considering our incomplete mapping: are we seeing these species in disturbed environments because they are exclusively 'weedy,' or have we failed to recognize their true, potentially fragmented, natural populations?

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The Psilocybin War

A \$127 Billion Threat

-By Kadin Willaeur

Why waiting for further clinical trials might cost us the future.

The late-2025 study by Colognesi et al., published in *Pharmacological Research*, provided that chronic, low-dose psilocybin mushroom microdosing completely normalized liver fat associated with fatty liver disease, reversed insulin resistance, and halted weight gain in diet-induced obese mice.

Notably, this effect was caused by psilocybin's interaction with the 5-HT_{2B} receptors in the liver and body, rather than the 5-HT_{2A} receptor in the brain.

In plain terms, the mushroom triggers physical healing in the body completely independently of the receptor that causes a psychedelic "trip" in the mind.

You don't need to take doses which induce psychedelic effects in order to heal.

In addition to this, human trials showed psilocybin to be a highly effective treatment for smoking cessation,

“JAMA Network Open (Johnson et al., 2026)”.

As well as the most effective treatment ever studied for treatment resistant depression,

“COMPASS Pathways Phase 2b Trial, published in the *New England Journal of Medicine* (Goodwin et al., 2022)”.

This list of treatable ailments psilocybin effectively targets represents approximately 127 billion dollars in yearly revenue for pharmaceutical companies.

If psilocybin can cure just 25-35% of the US population suffering from these conditions, it wouldn't just mean loss of income for pharmaceutical companies, it would begin a structural fracture like has never been seen before.

If psilocybin is capable of curing 50% of the population suffering from these conditions, it would cause the largest financial collapse in pharmaceutical history.

Similarly to the global financial crisis of 2007, the banking system would panic. Major banks hold hundreds of billions in corporate debt issued to pharmaceutical conglomerates. With those companies suddenly facing massive losses, the risk of debt default would cause banks to stop lending to everyone, temporarily freezing corporate credit lines across the globe.

Industries built entirely around chronic illness management would face instant obsolescence. Dialysis clinics, specialty pharmacies, and medical supply companies (insulin pumps, glucose monitors, CPAP machines) would face mass bankruptcies.

The fact the mice studies have not become widely known in the greater psilocybin community, and have not been transitioned into human testing, marks this as a special moment in history.

While some medications work wonders in mice, only to render completely ineffective in humans due to receptor and pathway differentiation, the receptors causing these changes are well known and present in humans in the same manner as they are present in the mice test subjects.

This means these studies have shown what psilocybin is likely capable of in the human body, but it hasn't been definitively proven or widely understood.

I believe when the greater psychedelic community adopts this information and starts providing Microdosing regimens to the general public to treat these conditions, there will be a sharp and deliberate response by those who profit from these conditions.

I foresee a multi pronged attack.

First, heavily biased negative outcome studies on psilocybin (which will be the first of their kind, as all studies thus far have yielded positive outcomes).

The mushroom community and its parallel researchers will likely be the first who are targeted with negative study results in an attempt to halt the progression of a mass Microdosing movement before it begins.

Given the limited avenues to argue psilocybin can cause harm to humans, I suspect one specific topic may be the focus of the biased research to come.

The same 5-HT_{2B} receptors which have been identified as the primary catalyst for positive health benefits associated with new studies, have also been associated with a specific health issue in the past.

Specifically, The weight-loss drug called Fen-Phen.

Which was pulled from shelves in the 90's due to its interaction with the 5-HT_{2B} receptors in hearts, causing significant thickening of the valves and leading to heart disease and heart attacks.

This was explored in relation to psychedelics during the LSDDEP1 trial, an open-label Phase 2a pilot study led by pharmacy researcher Dimitri Daldegan-Bueno and his team at the University of Auckland, New Zealand.

The study examined the impact of Microdosing Lysergic Acid Diethylamide over the course of 8 weeks.

Psilocybin and Lysergic Acid Diethylamide have notable structural & behavioral similarity in the body.

This study is especially relevant, as Lysergic Acid Diethylamide activates 5-HT_{2B} receptors 4-5 magnitudes stronger than psilocybin while forming a molecular "lid" over the receptors, causing them to remain activated for many hours.

Despite this potency in 5-HT_{2A} receptor activation and duration of the effect, the LSDDEP1 trial concluded with longitudinal echocardiograms and electrocardiograms (ECGs) data tracked throughout the 8 weeks, showing no clinical alterations in heart valve structure or overall cardiac function.

In addition, By the end of the 8 weeks, formal clinical interviews showed an average 60% reduction in depression symptom severity across the group with zero tolerance build up detected. Despite this study, I believe that discrediting it & claiming psilocybin has been found to cause heart disease may be one of the easier initial approaches taken by pharmaceutical companies.

After this, I foresee mass propaganda similar to the Manson case.

Intentionally curated and “cherry picked” stories used to curate public perception of psilocybin mushrooms.

As an example, Think what happened with hitchhiking.

Nearly everyone in the United States today believes hitchhiking is a highly dangerous activity due to the media, yet the statistical probability of being kidnapped, killed or raped while hitchhiking is approximately 0.001%, while simply driving your car yields a 0.015% chance of experiencing a crash on any given day.

Third, I foresee the legal system “making examples” out of members in our community.

Both small growers and highly regarded leaders among us will be arrested and given outrageous sentences in an attempt to create fear and distrust amongst us.

This new research is both incredibly exciting for the health of humanity, the future of psilocybin, and terrifying in the sense that it marks the beginning of an inevitable and historically significant period in psychedelic history.

If this appears fringe to you, hear my words.

The pharmaceutical industry has a documented history of faking and withholding clinical data to protect market share—as seen with Vioxx—resulting in thousands of American heart attack fatalities and the widespread use of ineffective, dangerous medications.

Any reasonable man or woman might agree, there seems to be only 2 reasonable possibilities.

1. This is the beginning of the “Psilocybin War”.
2. Or Psilocybin is not capable of what the current research suggests, which would render offensive action on the part of the government and pharmaceutical companies unnecessary.

I urge you all to be highly skeptical of any information or studies suggesting the second possibility.

It would be highly effective in the interest of the pharmaceutical industry if they could target this problem at the source, and convince the mushroom community that psilocybin is ineffective for the conditions which would create this situation via healing a staggering percentage of the population.

Studies have already shown the physiological safety of Microdosing psilocybin in a Phase II randomized controlled trial sponsored by the University of Toronto (ClinicalTrials.gov identifier: NCT05259943).

It is time to take this information, pared with the studies on mice and bring psilocybin to the general population.

There are approximately 160,000 active psilocybin mushroom growers in the United States alone.

I urge every one of you to invest in pill filling machines and to start providing low cost Microdosing regimens to everyone you know who is willing to accept them.

Those who are overweight, those who are diabetic, (especially pre diabetic), those who have fatty liver disease, those with metabolic disfunction, and even those among us who simply want healthier hair, or to avoid hair loss & graying.

Having each and every person who knows a grower test these results for themselves is the only way this information will effectively reach the general public without being intercepted.

Psilocybin mushroom microdosing is definitively safe, as the researchers referenced have gone to such great lengths to prove.

If we wait for permission,

If we wait for more studies,

We will lose the war that's coming.

Either we start now, or we've given up before it even began.

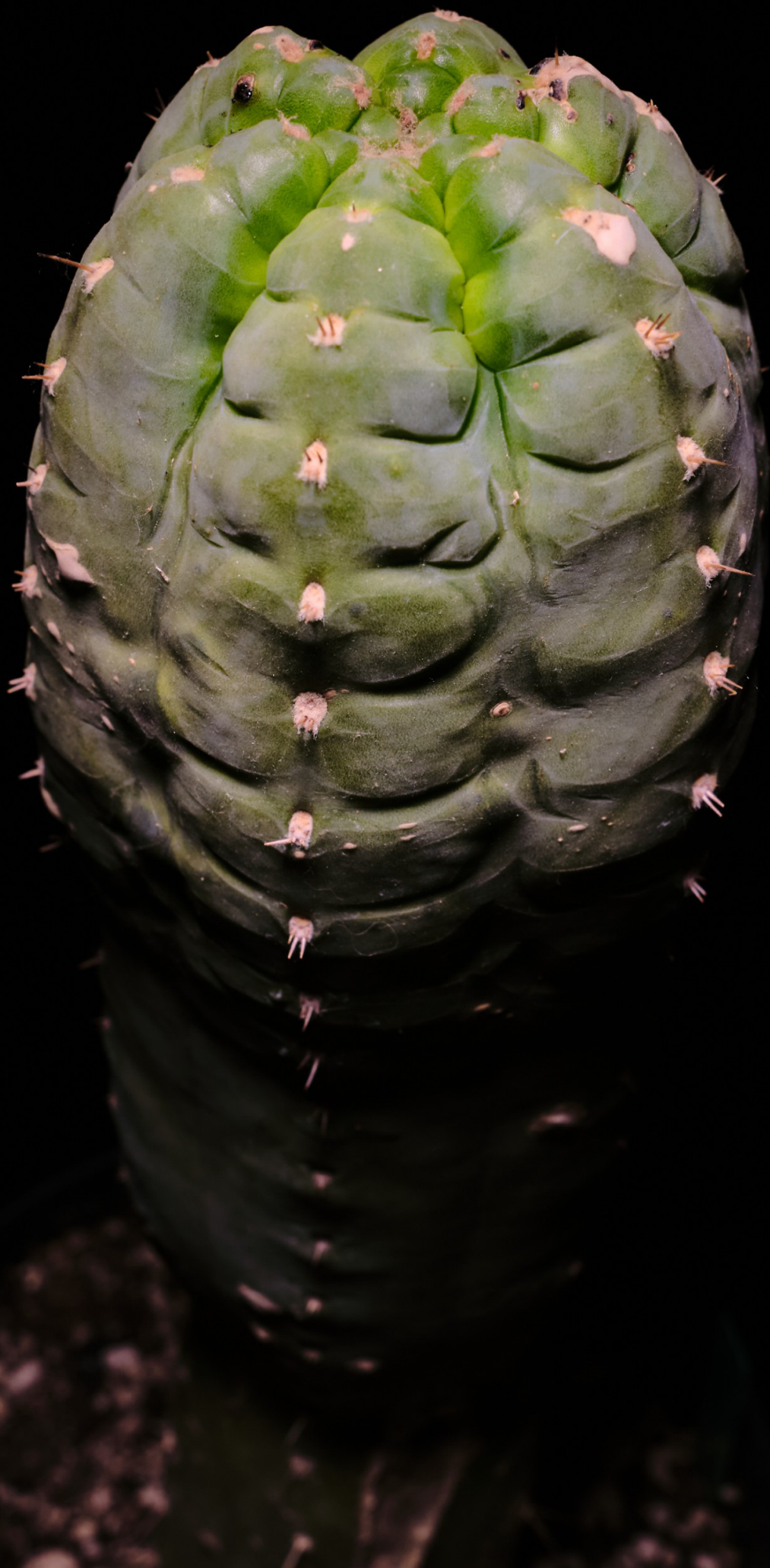
Mush love, good luck 🤝 🙏 🍄



CSD "Chemical Shamans Dick"

By Alien Nursurey-







Blue Voodoo gifted by Q/What The Fungi

By-Weighed Myco



