Herbs can alter the dreaming experience in a variety of ways - altering the texture & tone of the dream, improving dream recall, and supporting the development of lucid dreaming skills. Meet local and lesser-known herbs who have particular influence over dreaming, along with good sleep hygiene & "dream hygiene" practices to deepen your relationship to the dream world.

# the importance of dreaming

Those who cannot attain or are denied normal REM sleep suffer deeply, as they lose out on the mood-regulatory functions of dreaming.

One proposed purpose of dreaming, of what dreaming accomplishes (known as the mood regulatory function of dreams theory) is that dreaming modulates disturbances in emotion, regulating those that are troublesome. My research, as well as that of other investigators in this country and abroad, supports this theory. Studies show that negative mood is down-regulated overnight. How this is accomplished has had less attention.

I propose that when some disturbing waking experience is reactivated in sleep and carried forward into REM, where it is matched by similarity in feeling to earlier memories, a network of older associations is stimulated and is displayed as a sequence of compound images that we experience as dreams. This melding of new and old memory fragments modifies the network of emotional self-defining memories, and thus updates the organizational picture we hold of 'who I am and what is good for me and what is not.' In this way, dreaming diffuses the emotional charge of the event and so prepares the sleeper to wake ready to see things in a more positive light, to make a fresh start. This does not always happen over a single night; sometimes a big reorganization of the emotional perspective of our self-concept must be made -- from wife to widow or married to single, say, and this may take many nights. We must look for dream changes within the night and over time across nights to detect whether a productive change is under way. In very broad strokes, this is the definition of the mood-regulatory function of dreaming, one basic to the new model of the twenty-four hour mind I am proposing.

- Rosalind D. Cartwright, The Twenty-Four Hour Mind

We can also see evidence of the body and the subconscious aspects of the mind as they physically process the day's experiences in phenomena like the "<u>Tetris effect</u>", in which a repetitive activity during the day will dominate the imagery of dreams and the in-between state before and after sleep. Not just imagery, either – other types of physical sensations will also recur in these moments.

Dreams are an opportunity for the subconscious to go to work on the troubles and lessons of the day, and integrate them into the deeper mind. They can serve as a form of <u>emotional</u> <u>detoxification</u>, in which highly reactive elements are broken down or joined with other complexes to be eliminated, rendered inert, or made newly useful.

# practices for dreaming

# sleep hygiene

Good dreaming depends on good sleep. Managing light and other aspects of your bedtime environment is essential to getting enough sleep. If you know when you need to wake up and how long you want to sleep for – most adults should get 8-9 hours every night – you can count backward and determine your optimal bedtime. Then set an alarm for 1 hour before that time, and begin to dim lights, avoid screens, and prepare yourself mentally & physically for sleep when it goes off.

A good indicator of sufficient sleep is when you can get through the "midday slump" without stimulants or naps.

Dreams are also an indicator of sleep quality: insufficient sleep inhibits dream recall. People with poor-quality, restless sleep will either dream intensely and disruptively – often as nightmares – or else dream not at all. The latter is more likely when sleep is unsatisfactory on a chronic, ongoing basis.

Mugwort (*Artemisia vulgaris*) has helped a number of my clients with disrupted sleep, specifically those who wake in the middle of the night and have difficulty falling back to sleep. Mugwort in formula with skullcap (*Scutellaria lateriflora*), passionflower (*Passiflora incarnata*), betony (*Stachys betonica*), and/or motherwort (*Leonurus cardiaca*) effectively improves the capacity to sleep straight through the night. This occurs independently from its effects on dreaming; even in those few people for whom mugwort "doesn't work" as a dream herb, it can still improve sleep quality.

## dream hygiene

Certain practices are essential to deepening your dream experience and building awareness of the transitions between wakefulness and dreaming. Breathwork before bed is very helpful in relaxing the body, particularly the "square breathing" exercise. Visualization and meditation of many styles are also extremely useful here.

Take advantage of sensory cues as part of your bedtime habits. The scent and taste of herbs becomes a subconscious cue to your body, especially when you work with the same herbs consistently, and even more so when you work with them exclusively around sleep and dreaming. Incense, pillow bags, tea, tincture, and smoke all fit this description. (This is one of the reasons I don't recommend herbs in capsules!)

## dream recall

A dream journal is an essential tool when trying to build recall and approach lucidity. Simply write down whatever you can remember, every morning (or in the night if you wake from a dream before morning). When you write it down, you are essentially giving yourself a cue or reminder that you want to remember your dreams. You will be able to remember more detail with time.



Setting intent as you lay down and transiton into sleep is also helpful. This can be as simple as repeating to yourself, "I will remember my dreams" several times as you lay in bed. Again, having a consistent routine is important here.

# lucid dreaming

During the day, get in the habit of making "reality checks": little tests or notices which become so habitual & recurrent that you also make them during your dreams. When you notice something impossible or inexplicable happening, it's an alert that you are in fact dreaming. Common reality checks include:

- trying to push a hand through the other hand
- looking at your watch or phone to check the time (the numbers often appear illegible or odd in dreams)
- opening a book to a random page (dreamtext may be very different and, if legible, often contains messages for you)
- turning the lights on or off (in dreams the switch might not work)
- attempting to do impossible things, like jumping up and hovering in the air

Build your own repertoire – whatever you can make habitual and semi-unconscious will begin to bleed over into your dream self.

Another helpful practice to build lucidity is to make a concerted effort to maintain awareness from full consciousness through hypnagogia (the "in-between" state) into dreaming. Certain herbs enhance this capacity (e.g. bittergrass, *Calea zacatetichi*), but intention and mental discipline will take you a long way on their own.

# don't try to force it every night

Dreamsleep may be your most – or your *least* – restful. For me, when I dream deeply I wake up feeling invigorated and excited. For Katja, if she spends the night dreaming she feels as if she's worked all night and not rested. You may find yourself in either camp.

Regardless, it's important not to force it every night. Dreaming is a me[n]ta[l]physical metamorphosis, and we can't all go from caterpillar to butterfly every night!

When not performing targeted dreamwork, allow your dreams to cycle naturally through phases of activity and rest. You might want to track these, and compare them with other cycles present in your life – days of work and play, waxing & waning phases of the moon, seasonal shifts, and so on.

Recognize that some of these techniques & herbs in fact depend on disrupting sleep – e.g. the "<u>wake-back-to-bed</u>" method, or Haitian herbalist Jacquelin Jinpa Guiteau's advice to simply drink a lot of water before bed – waking frequently will give you more chances to [remember your] dream.

Physiologically, REM is a higher stage of sleep, so artifically extending your time will mean you're borrowing time from the functions of physical repair and recovery that occur in deeper sleep stages.

# dream analysis

This includes interpretation of the autosymbolism in hypnagogic experiences. As you fall asleep or awaken, are you rising or falling, entering or exiting? What do you see, hear, feel? The simplest(*-to-you*) explanation is probably the best.

Here's an exercise: Identify an object from your dream. Then, speaking as if you were the object, complete these statments:

i am a \_\_\_\_. as a \_\_\_\_ my purpose is ... what i like most about my purpose is ... what i like least about my purpose is ... as this object, what i fear most is ... what i desire most is ...

There are lots of other ways to approach this topic. You can always start with Carl Jung – the book *Man and His Symbols* is a good place to begin. (Obviously there are some limitations, starting with the fact that it's not entitled *Humans and Our Symbols*, but you've got to start somewhere. Just avoid any resource that purports to be a "dream dictionary", as these tend to be highly euro/privileged-people-centric in their source material and generalize without basis.)

## nightmares

Breathwork before bed, visualization / meditation, and intention-setting are all as helpful at reducing nightmares as they are at inducing dreams.

In some cases, counseling will be necessary, particularly those types which emphasize expression. A dream journal may be helpful, or may exacerbate the problem, depending on how you relate to it – if you find yourself writing the same story down every morning, you may want to stop journaling for a time. Or, you can make a habit of writing down what happened, followed by what you *wish* had happened instead, or *want* to happen next time. Remember, writing is a way to make your desires more concrete.

For those plagued by chronic nightmares, we recommend tonic nervine herbs all day, every day. Some examples include:

- hawthorn (Crataegus spp.) for heart protection
- st john's wort / solsticewort (Hypericum perforatum) for a shield of light
- wood betony (Stachys off.) for grounding in the body
- ashwagandha *(Withania somnifera)* for working through trauma in those with PTSD, and for restoring circadian rhythms

**For rescue:** Keep a remedy beside the bed to take if you awaken from a nightmare. Ghost pipe *(Monotropa uniflora)* is the most effective herb I know for this purpose – 1-9 drops is usually sufficient (compare with its ability to halt a bad trip).

Some people find the Rescue Remedy flower essence blend helpful here, or other essences (black cohosh for dreams of being trapped by vague dark pursuers; st j when light is needed, lemon balm for an envelope of calm, yarrow for psychological/emotional armor, etc).

## anti-dream agents

Some herbs interfere with dreaming, particularly the heavy hypnotics like wild lettuce *(Lactuca virosa/spinosa)* and hops *(Humulus lupulus)*. Cannabis, especially the "indica" types, also interferes with dream recall, particularly when taken close to bedtime.

# dreaming in the way of . . .

Compasses and elementals are a favorite way of ours for managing information of many kinds. You can work with this schema to analyze the tendencies of your dreams. If you find yourself stuck in one pattern too much, consider working with images or allies from another element to balance it out.

#### earth

method: sleeping, a lot.
posture: acceptance.
motto: "this happens."
excess: blackout.
images: soil, wood, boulders, mountains, buildings, standing.
allies: pedicularis, calamus, valerian, passionflower.

#### air

method: smoke.
posture: structuring and clarifying.
motto: "this is how it happens."
excess: overanalyzes, gets stuck on impossibility.
images: flying, wind, messages.
allies: mugwort, bittergrass, cannabis (sativa), Salvia divinorum.

#### fire

*method:* tinctures. *posture:* forceful, assertive, saturated. *motto:* "this will happen." *excess:* disrupts through intensity. *images:* fires, fights, athletics. *allies:* st j, calamus, snowdrop.

#### water

method: tea.
posture: fluid, going along with it, following the Tao, going with the flow.
motto: "this is happening."
excess: slips into passivity.
images: bodies of water, waves, currents, swimming.
allies: cannabis (indica), kava, pedicularis.

# herbs for dreaming

Generally speaking, we don't want heavy sedatives here. A combination of cerebral circulatory stimulants paired with muscle relaxants seems to do the trick. Experimentation is necessary, because each individual responds best to different herbs.

# mugwort (Artemisia vulgaris)

Mugwort is the primary herb I recommend for dreamwork. It is inexpensive, ubiquitous as a human-following and city-thriving weedy herb, and entirely reliable for its effects on dreaming.

Those effects are best described as **intensifying or enhancing to dream texture, resolution, complexity, and recall.** Mugwort "takes you up a level" from your habitual dream state:

- If you tend not to remember anything about your dreams, mugwort will help you [re]collect bits & pieces; if you have spotty recall, it will help you construct a more complete narrative thread.
- If you dream only in black & white, mugwort may introduce colors. (These often appear in the order they arise during <u>infant visual development</u> red and yellow first, followed by the greens and blues and purples.)
- If you have solely visual dreams, mugwort-enhanced dreams might have other senses engaged. Sound, touch, smell, and taste tend to emerge in that order.
- If you already have good dream recall and rich texture to your dreams, you may begin to become aware of your dream state while dreaming with mugwort. Then you are ready to practice lucid dreaming, the active manipulation of the dream state at will.

Mugwort alone won't make you a lucid dreamer overnight. This is a practice and requires consistent effort, including mindset-managing and intention-setting practices before bed such as breathwork, visualization, and meditation. Keeping a dream journal is an important method for bolstering dream recall and enabling you to identify recurring patterns in your dreams.

There are many ways to work with mugwort for dreaming:

- Tincture: 3 9 drops of standard tincture, taken just before bed. This is the simplest method for most people.
- Smoke: a pinch of mugwort in a pipe, alone or in a smoking blend, is as reliable.
- Tea: short hot infusion, <sup>1</sup>/<sub>2</sub> to 1 cup, simple or as a primary component of a dream tea formula.
- Dream pillow: dried mugwort herb mixed with others (usually lavender, mints, or other aromatics) in a small pillow or sachet, kept near the pillow so it can be smelled as you lie down to sleep. Incense may also serve similarly.
- Flower essence: 1 9 drops of stock or dose bottle concentration. Enhances receptive qualities of the psyche, helps integration of unconscious with daily life.

In any of these applications or formulations you might make, be sure to keep the sensory qualities of the herb undiluted. You need to taste it or smell it for it to work. With repeated use, you'll **build a sensory reflex** by which the flavor or scent of the herb reminds you, mentally and physically, of the state of mind you're trying to cultivate.

Be aware that for humans who menstruate, mugwort given in 'physiological' doses (1-9 droppersful of tincture, or a quart of tea over the day) can bring on the menses more rapidly and heavily than usual. The doses we take for dreamwork are small in comparison, and don't usually have this effect, but some very sensitive individuals may yet observe shifts in their menstrual cycle when they work with mugwort.



It's also stimulating to some people! As always, experiment with new herbs on an easy weekend, not in the middle of crunch time.

# kava kava (Piper methysticum) & calamus (Acorus calamus)

Kava is an effective sedative, muscle relaxant, and anodyne which helps you release stress/anxiety without impairing cognitive function. Calamus is a pungent aromatic bitter carminative nervine relaxant. The two of them together have a complementary set of effects, which serves to **relax and warm** the physical body while opening the sensorium into **wide-angle perception.** This allows for easier transition into dreamspace, when taken before bed. A 50/50 combination tincture taken in 4-12 dropperful doses will work well; for those who don't mind the flavors, decoction is also effective at 4-12 fluid ounces.

# pedicularis (Pedicularis densiflora & other spp.)

This herb has an immediate **body-inhabiting effect** which is perfect for those who are too Airy, yet is not so "heavy" that it impairs creative mental activities, including dreams. Smoke and tincture are effective; tea would likely be as well, though I haven't worked with it that way. See also *Stachys officinalis*, which helps move the center of consciousness into the heart. Both these herbs go under the common name "betony", so be sure you know which species you have.

# cannabis (Cannabis sativa)

As mentioned earlier, cannabis can inhibit dreaming if taken in too great a quantity (for the individual) and/or too close to sleep. In lesser amounts, and for particular strains (generally considered "sativa" or THC-dominant), may enhance dream intensity instead. You'll have to experiment for yourself to determine your own sensitivity/response profile. CBD-only extracts don't seem to impact dreaming one way or another.

# bittergrass (Calea zacatechichi)

This plant is frequently referred to as "Aztec dream herb" or "Mexican dream herb", particularly in lucid-dreaming-enthusiast circles; the botanists want to call it *C. ternifolia* now. *Zacatetichi* is Nahuatl for bittergrass. The herb is historically associated with the Oaxaca Chontal, a people of Zapotec descent (though note that the name "Chontal" has been applied to numerous groups of people), but the plant has native distribution throughout Mesoamerica and current distribution down into Colombia and as far as <u>Guyana</u>.

This herb enhances *hypnagogia*, a term which refers to the images and experiences which occur in the threshold consciousness during the transition from wakefulness into sleep. Bittergrass specifically intensifies the [dis]play of light-on-shadow when the eyes are closed in a dark room – the "eyelid movies". In a key study of the herb, "Psychopharmacologic analysis of an alleged oneirogenic plant: Calea zacatechichi" (Mayagoitia, Diaz, & Contreras, *Journal of Ethnopharmacology* 18(3):229-43, January 1987), the authors write: "The subjective reports of dreams were significantly higher than both placebo and diazepam, indicating an increase in **hypnagogic imagery** occurring during superficial sleep stages" [emphasis mine]. In measuring



dreamers' brainwave patterns, they also found that the herb "increased the superficial stages of sleep and the number of spontaneous awakenings", and went on:

Ingestion of the plant produces a light hypnotic state with a decrease of both deep slow-wave sleep and REM periods. [...] These results show that zacatechichi administration appears to enhance the number and/or recollection of dreams during sleeping periods. The data are in agreement with the oneirogenic reputation of the plant among the Chontal Indians but stand in apparent contradiction to the EEG sleep-study results. It is well known that dreaming activity is correlated to the REM or paradoxical phase of sleep (Aserinsky and Kleitman, 1953) and it could be expected that a compound that increases dream would also increase REM stage frequency or duration, as it has been shown to occur with physostigmine (Sitaram et al., 1978). In contrast, zacatechichi increases the stages of slow wave sleep and apparently decreases REM sleep. This also occurs with low doses 12-10 mg) of diazepam (Harvey, 1982). Despite this similarity in EEG effects, diazepam decreases dreaming reports (Firth, 1974) while zacatechichi extracts enhances them. Such discrepancy may be explained by the fact that **dreaming and imagery are not restricted to the REM** episodes but also occur during slow wave sleep (SWS I and II) as lively hypnagogic images (Roffwarg et al., 1962). Such images are reported as brief dreams and are known to be enhanced by marihuana (Hollister, 1971). All this suggests that Calea zacatechichi induces episodes of lively hypnagogic imagery during SWS stage I of sleep, a psychophysiological effect that would be the basis of the ethnobotanical use of the plant as an oneirogenic and oneiromantic agent. [Emphasis added.]

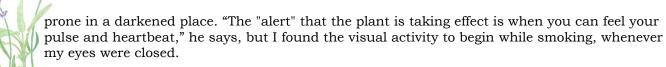
They studied its effects on cats in ways that are somewhat disturbing – implanted electrodes, doses which elicited twitching and retching, things of this nature. It seems oddly considered to choose cats. Obligate carnivores as they are, cats usually aren't much for herbalism – generally limiting themselves to emetics and, of course, pheremone-mimetics like catnip and valerian. Many cats do have a reputation for seeking psychotropics, though... In any event: *thanks to you*, "3 male cats (3 kg each)", *for sharing your experiences. We owe you*.

Much discussion of Calea is due to this study, and in turn to the "informant" who taught the ethnobotanists about the herb, including that Chontal traditional practitioners would discern between "good" and "bad" bittergrass varieties "according to their psychotropic properties." *Thank you for sharing your experience, we owe you.* 

In my own experience, bittergrass is very effective at eyelid movie enhancement: it encourages the shaping of forms into familiar visions, more responsive to intention. If you are particularly responsive, you shouldn't be at all surprised if it increases daydream face-counts in tree bark, clouds, and other (fractal/<u>fibonacci</u>/something-happening-with-the-powers-of- $\phi$ -and- $\psi$ )-type representations – with whom one might reasonably expect to have a productive conversation.

Bittergrass can be taken as tea or in smoke. It's likely effective in tincture, given that in the Mayagoitia *et al* study, their methodology allowed them to determine that "the active compounds might be found in the polar fractions", which is to say they are water-soluble. Dale Pendell in *Pharmakopoeia* notes the herb carries "triterpenes, flavonoids, sesquiterpene lactones, organic acids, and a glucosidelike bitter principle" along with "unidentified alkaloid C21H26O8"; he goes on to note that "it looks as if the oneirogenic activity and the bitterness, if not derived from the same compound, are at least traveling companions."

The smoke itself tastes notably bitter, which is not always the case with bitter herbs, but is not surprising given the variety of bitter tastants this one carries. I find the bittergrass dream experience different when taken by smoke as opposed to tea, essentially according to the schema outlined earlier, with regard to dreaming by the elements. I can vouch for Dale's suggestion of an infusion ("a good palmful of leaf per cup") followed by smoke, then laying



## Salvia divinorum

This is a potent plant. Be careful. Sometimes it is called ska pastora.

A constituent of some repute, salvinorin A is "a highly potent psychotropic nitrogen-free diterpene and an agonist on the kappa opioid receptor, which has depersonalization, dysphoric, and disassociation effects similar to pentazocine" (Jose-Luis Diaz, <u>2010</u>).

*S. div* is sorted by Diaz into a group he calls "cognodysleptics", consisting of Cannabis, *Calea z.*, and *S. div*. These, he says, "contain not alkaloids but terpenes, i.e., molecules without nitrogen that produce effects distinct from those listed above. Thus, although they no doubt stimulate the imagination, affect recent memory mechanisms, or highlight auditory or taste sensations or fantasy, they would rarely produce hallucinations." While there is some similarity of experience among these three herbs, they are nonetheless quite distinct from one another. And *S. div* can *definitely* induce hallucinations, particularly in the doses & forms available to today's psychonaut.

Dale Pendell in *Pharmakopoeia* makes the important observation that *Salvia divinorum* loves the dark. He describes its effects as assertive in darkness, disappearing in light, and strongly connected to language – a dream state of illuminated Logos, words made present; "an interactive lucid dream accessible to the will." Though I'd caution: it's only so accessible if the traveler is intentional and prepared, and unpleasant experiences are always possible – alien abduction & surgery scenes are not uncommon themes for people of our culture. It's worth asking yourself if this is the kind of crucible you want to be purified in.

For dreaming per se, one or two drops of a high-potency tincture should be sufficient. A few leaves from a fresh plant, chewed slowly in the dark, may also serve. Best to have a question in mind.

## snowdrop (Galanthus nivalis)

Snowdrop is a rare plant and is on the <u>IUCN Red List</u> with a global assessment of Near Threatened (population decreasing) status. **Do not wildcraft.** If you were to work with this herb, you would only ever do so by selectively harvesting a few leaves from a healthy stand of organically cultivated plants, *after they have flowered and set seed for the year.* 

Galantamine, an unusual constituent, is an acetylcholinesterase inhibitor. As the <u>wiki</u> says:

Acetylcholine is the neurotransmitter used at the neuromuscular junction—in other words, it is the chemical that motor neurons of the nervous system release in order to activate muscles. This property means that drugs that affect cholinergic systems can have very dangerous effects ranging from paralysis to convulsions. Acetylcholine is also used as a neurotransmitter in the autonomic nervous system, both as an internal transmitter for the sympathetic nervous system and as the final product released by the parasympathetic nervous system.



Inhibiting acetylcholine is therefore somewhat dangerous, and is the mechanism of action for a variety of toxins. Galantamine, however, has been extensively employed as an Alzheimer's medication – which means lots of people are taking it. A common pharmaceutical form, Razadyne ER (galantamine hydrobromide), is often given in initial doses of 8 mg for 4 wks, followed by 16 mg for 4 wks, then 24 mg ongoing.

This year I had occasion to wonder, how much galantamine might there be in 1 mL of 1:5 95% fresh April/MA-gathered leaf tincture? A <u>study with galantamine content measurements</u> in various species found "0.05 to 0.36 mg/g dry weight (DW) in the bulbs of [*Galanthus nivalis* populations]." At the high end, 0.36 mg/g x .2g dry herb equivalent in 1 mL of tincture would yield 0.07 mg/mL. But of course, the actual value would be less than that – probably much less – because the leaves will always have lower content than the bulbs. Yet this dose was sufficient to induce undeniable effects. So again, we find a plant in which the effects can be observed at doses which deliver amounts of so-called "active constituent" far below those considered standard when given in isolation.

Snowdrop tincture may be taken in the middle of the night, before "second sleep", about five hours after lights-out, starting experimentation with 10 drops to a dropperful.

Note: this herb retains wakefulness – or at least, the subjective experience of wakefulness – and may cause abdominal cramping. My 1mL dose caused static agitated mental activity which *seemed* to persist straight through to waking – but during which, upon second consideration, a dream *had* occurred in between. This was accompanied by abdominal tension, with occasional minor cramping. Compared to bittergrass and mugwort, these were each *very different* kinds of experiences.

A constituent in clubmoss *(Huperzia serrata)*, huperzine-A, is another naturally-occuring AChE inhibitor with a reputation for both Alzheimer's support and oneirogenesis.

## ubulawu – (Silene capensis)

This is one I have not had the opportunity to experiment with yet.

Generally promoted and sold on the internet as "Xhosa dream root" or "African dream herb", <u>ubulawu</u> grows throughout southern and tropical Africa. There it is known to bring communication with ancestors.

According to most reports it can be taken effectively as simple powder in water. Traditionally it is stirred with a fork to produce foam. This "soapy" expression indicates the presence of saponins; the susptected psychoactive constituents of this herb are of this class. The "hard" or "traditional" method includes a vomiting purge.

Ubulawu is consumed in the morning of the night on which one wishes to dream, before eating. Usually it's said that the herb's active element "takes time to move through the bloodstream", but it's probably more accurate to say that it takes time for its constituents to be metabolized into an active form.

## resistant starch

Not herbal, but worth mentioning. The effects of resistant starch consumption on dreaming are not thoroughly explained – usually what's offered is a more or less hand-wavy "gut flora!



hormones! stuff!" association chain. Still, the effect is widely reputed in the paleo community, and I can vouch for it personally, though it seems to have found relatively little fanfare in the lucid dreaming enthusiast circles.

There are a variety of foods you can prepare to maximize resistant starch content, but the easy mode is just to buy a bag of Bob's Red Mill potato starch. Somewhere in the teaspoon-to-tablespoon range is sufficient to increase dream intensity & recall.

Finally, please consider any particular ally plant you've worked with closely. The relationship is more important than the species, here.

Ryn Midura June 2018