San Pedro and Peruvian Torch Cacti
Harm Reduction Information

San Pedro (Echinopsis pachanoi, also called Trichocereus pachanoi),
also called huachuma and achuma; Peruvian torch is Echinopsis peruviana

Last updated 10/28/2026

Please Read First

This page is educational. It is not medical, legal or professional advice, and I am not a physician or an attorney. This information was gathered from published harm reduction organizations, medical and legal sources, and my own training and experience, and I may have made mistakes. You are responsible for confirming anything here before you act on it, with a qualified medical provider and, for questions of law, an attorney. Laws and knowledge about psychedelics change quickly, and some of what is written here may have changed since the date above. Nothing here encourages anyone to break the law. It exists to reduce harm for people who will make their own choices. I do my best to keep up with current law and research, but I cannot promise that anything here is current or complete.

It is advisable to meet with a psychedelic-informed physician for an assessment before using any psychedelic or related substance.

Where this information came from: The sources listed under References, and my own training and experience.

This document was drafted with the support of Claude, an AI assistant. I reviewed it, and AI and I can both be wrong, so check anything that matters to you before you act on it.

What San Pedro and Peruvian Torch Are

San Pedro is a fast-growing columnar cactus of the Andes, grown wild and in gardens at roughly 2,000 to 3,000 meters, and the name belongs strictly to Echinopsis pachanoi (also written Trichocereus pachanoi) [1]. In everyday use it stretches to cover other tall mescaline cacti, among them the Peruvian torch (Echinopsis peruviana, also called Trichocereus peruvianus) and the Bolivian torch (Echinopsis lageniformis, formerly Trichocereus bridgesii) [1][2][3]. These plants interbreed and look alike, so the label on a nursery tag may or may not match what is in the pot [4]. All of them hold mescaline, the main compound in peyote, which has its own sheet; the Mescaline sheet covers the molecule itself [5][4].

In the Andes this plant has older and more specific names than San Pedro. Huachuma, wachuma and achuma are the names used by people who work with it as a teacher and healer plant [6][1]. The name San Pedro, Saint Peter, is usually tied to the Spanish effort to suppress its use, and one scholar reads it as pointing to the keeper of heaven's gate, because the cactus was said to carry people to heaven while they were alive [1][7]. This

sheet says San Pedro for the plant because most of what is written for English readers uses that name.

Where It Comes From

E. pachanoi is native to Ecuador and Peru and occurs in Bolivia, with plantings elsewhere; the Bolivian torch grows in Bolivia from about 1,000 to 3,300 meters, and the IUCN rates both species Least Concern [1][2]. That rating counts whole populations and misses local overharvesting, and Peruvian sources describe real pressure on wild plants and on the traditions that depend on them [8].

In a garden the cactus can grow up to about 30 centimeters a year, cuttings root easily and produce clones of the parent, and it is widely sold as an ornamental [1]. That is why San Pedro can be bought at a plant nursery, and why the law around it feels strange (see Legal Status).

A Short History and Whose Tradition This Is

The archaeology reaches far back. An abstract on northern Peru lists use for magical-religious purposes among the Cupisnique (about 1500 BC), the Chavin (about 1000 BC), the Moche (100 to 750 AD) and the Lambayeque (750 to 1350 AD) [9]. Peru's Ministry of Culture adds Nazca to the images of the plant on ancient objects [6].

Spanish colonizers tried to suppress the practice, and it persisted [1]. Today, in northern Peru, healers called maestros curanderos work with the cactus at an altar called a mesa, where it is part of diagnosing illness and cleansing harm, often in the early hours of a Tuesday or Friday [9]. They prepare it as a bitter brew, sometimes with tobacco [1].

On 11/14/2022 Peru's Vice Ministry of Cultural Heritage and Cultural Industries signed a resolution, published in El Peruano on 11/17/2022, declaring the knowledge, wisdom and traditional uses of San Pedro within curanderismo in northern Peru to be Cultural Heritage of the Nation. It names the tradition as living in Lambayeque, La Libertad, Piura, Tumbes, Cajamarca, Amazonas and Ancash, separates ritual use from recreational use, drug abuse and what it calls mystical tourism, excludes the harmful use of wild San Pedro (called cimarron) by people who work to hurt others, and orders a status report on the practice every five years [6]. What this means for a person outside the tradition is taken up under Sourcing, Respect and Cultural Context.

About the Sources

The strongest evidence specific to these cacti is a 2010 chemistry paper that measured 14 plants [5], and two surveys of use: 42 people who attended San Pedro ceremonies in the Netherlands (called the Dutch study here) and 452 English-speaking adults who had taken mescaline in everyday settings [7][10]. The best human data on the molecule come from Basel studies of pure mescaline in healthy adults (not cactus), read through summaries [11][12], and a 2019 toxicology review of peyote and mescaline fills in the body effects [13]. Community sources such as PsychonautWiki and TripSit, education

sites and Wikipedia carry much of the rest, and the text names which is which. Law-firm style explainers and a plant seller carry some legal points, flagged where the statute itself was not read.

What the research cannot yet tell you. These gaps bear on safety or on a decision:

1. No controlled study has given the cactus itself to people. The best human data come from pure mescaline, which may not predict a brew that holds other alkaloids [7][12].

2. Almost no formal research tests mescaline together with other medicines, so the flags under Contraindications rest on community sources, case reports and pharmacology.

3. The safety of commercial San Pedro retreats has not been studied.

4. How long a cooked brew keeps has not been studied.

5. Federal courts have not clearly defined where preparing San Pedro begins [14], and it is unsettled whether Colorado's personal-use protection reaches mescaline extracted from the cactus at home [15].

What It Feels Like

No one can promise you what your day will be. San Pedro is often described as gentler and more body-aware than other psychedelics, and the day can go many ways. The experience differs a great deal from ayahuasca, from ketamine and from MDMA, and it varies from person to person and from one day to the next. What follows is what people report, drawn from the Dutch study and a large survey of use in everyday settings. Almost all of it comes from people who took the cactus with preparation, with other people around or with a plan, so the setting is part of what they describe [7][10].

The Body and the Nausea

For most people the body speaks first, and the early stretch can be heavy. Some traditional reports describe a heaviness or lethargy before the lift [16]. Ceremony leaders in the Dutch study told participants to expect nausea and vomiting (which they called purging), tremors, heart palpitations, sweating, headaches and sudden spells of feeling very cold or very warm [7]. In the same study, physical distress was one of the two most common challenging experiences [7]. See Nausea and Vomiting, under the effects on the body, for what the sources say about why.

Once the nausea passes, many people describe a stimulated, body-aware opening, with energy and a wish to move, talk or make music. The Dutch ceremony leaders said San Pedro generally, but not always, lets people be more active physically and socially than other psychedelics do [7]. The study's authors read participants' low scores for feeling cut off from the body as a sign of the plant's stimulating, adrenaline-like chemistry, and report that leaders and attendees often called the experience gentle, physically grounding and down to earth [7].

How the Day Tends to Move

Onset is gradual and the effects come in waves. Ceremony leaders in the Dutch study described the intensity as rising and easing, so that a person can feel they are sobering up and the main part is over, and then the effects return [7]. The long plateau is part of the plant: the sources describe a slow onset, a peak that lasts for hours and after-effects that run well past it (see How Long It Lasts) [17][18].

Seeing and Perceiving

People describe changes in color and pattern, a different sense of time, and a shift in what the things they see and hear seem to mean [16][19][17]. In the Dutch ceremonies, simple patterns, more complex scenes and a changed sense of what perceived things mean all scored in the middle of the range, and the blending of sound and sight scored a little lower [7].

Feelings and Spirit

The most strongly felt part, in the Dutch study, was the spiritual one. Spiritual experience scored higher than any other dimension, with feelings of unity, blissful states and insightfulness in the middle range [7]. About two thirds of participants (26 of 42) had what the researchers count as a complete mystical experience, while anxiety, impaired control and thinking, and feeling cut off from the body scored low [7]. In a larger online survey of 452 adults, respondents rated the mystical-type effects as moderate, the loss of the sense of self and psychological insight as slight and the challenging effects as very slight; most had used mescaline rarely, and about three quarters of them for spiritual exploration or to connect with nature [10]. In controlled studies of pure mescaline, people reported less fear and anxiety than with LSD or psilocybin [19].

The Dutch ceremonies were structured and supportive (see What Shapes the Day), and the authors say they cannot separate what the ceremony did from what the cactus did [7].

Insight and Meaning

Insight is a common thread. In the survey of 452 adults, between a third and a half rated the experience as one of the five most meaningful or spiritually significant of their lives. Most people with a history of depression, anxiety, PTSD or an alcohol or drug use disorder reported improvement after their most memorable experience, and those who rated their insight higher were more likely to report improvement in depression, anxiety and alcohol or drug use [20]. These are looking-back reports from people who chose to take it, so they describe what people say and not what the cactus caused.

When It Is Hard

Most people in the Dutch study found the day not particularly challenging, and a few found it very hard: two of the 42 felt more than moderately challenged, and one of them rated it between strong and extreme [7]. Among the challenging feelings, grief and physical distress were the most common, ahead of fear, a sense of losing one's mind, isolation,

thoughts of death and paranoia [7]. Good and hard states were not opposites: hard feelings tended to travel with other hard feelings and good ones with good ones, and the same person could have a blissful, mystical day and a difficult one at the same time [7].

ICEERS adds that stress, depression, grief or difficulty in a person's life make set and setting matter more, and that unconscious material can surface and be emotionally intense [16].

What Shapes the Day

Set, setting and the people around you shape the day. The Dutch ceremonies took place in a restricted indoor or outdoor space with a ceremony leader and guides, comfortable seating, music, food and drink, a fire and an altar [7]. The authors note that in other research, supportive and structured ceremonies go with more mystical and fewer challenging experiences [7].

The Days After

Sleep can be hard once the effects wear off. Dutch ceremony leaders warned of restlessness, anxiety, visual hallucinations or intense dreaming at the end of the day, and of slight headaches [7]. See Preparation and Integration for planning the long tail.

How It Is Taken

Traditionally the cactus is cut, cooked into a bitter brew and drunk in a night ceremony led by someone with long training [6][8][1]. Outside that setting, several forms turn up. No controlled study has tested them against each other, and no amounts are given here.

Swallowed as a Brew

Ceremony providers in the Dutch study prepared it in three ways: boiling dried chips in water into a concoction, mixing powdered cactus into apple juice on the spot, or cooking the flesh of fresh cactus into a liquid. The leader set the amount, usually the same for everyone at first, and offered extra helpings as the day went on [7].

The risks specific to brews are the unknown strength of what ends up in the cup, the very bitter taste (and the vomiting that follows), spoilage of leftovers, and a long wait before you can tell whether you have taken enough or far too much [16].

In some northern Peruvian settings the brew carries tobacco, and ayahuasca or Brugmansia (a deliriant plant, with its own sheet) have been used in its place [1][9]. If a brew is offered with something else added, ask what, and read about that plant before you drink; plants taken together do not share a safety record with the cactus alone.

Forms You May Meet

Fresh cactus, chewed or juiced. The green tissue can be eaten directly or blended into a juice. Tripsitter describes eating it raw as unpleasant and bulky, usually with juice to cover the taste, and the same page promotes the plant, so read it as marketing and not as

study [21]. The risks are the heaviest nausea and retching, plus spines and skin irritation during cutting [16][3]. Strength is least predictable in this form, since you are eating the plant exactly as it grew [5].

Dried powder and capsules. Dried and ground cactus can be packed into capsules, which skips the taste and may soften the nausea, a community statement and not a measured result [19][21]. Dried material of unknown strength is hard to measure by eye, and storage matters (see Toxicity and the Mind) [9][13].

Extracts and purified powder. Extracting mescaline from the plant produces a purified powder, which can be sold as capsules and is a different product from the cactus. Tripsitter says this is the most common form for synthetic powder and that the main hazard there is adulteration with something stronger, such as an NBOMe compound [21]. Colorado law makes manufacturing natural medicine with an inherently hazardous substance such as butane or propane a level 2 drug felony, and lists lawful personal use separately [15]. Extraction solvents are flammable and poisonous.

How Long It Lasts

Long, and the sources spread. PsychonautWiki gives an onset of about 45 to 90 minutes, a peak of roughly 4 to 6 hours, a total of 8 to 14 hours and after-effects of 6 to 36 hours; TripSit gives an onset of 60 to 180 minutes or more, effects of 6 to 12 hours and a total of 10 to 20 [17][18]. In the Dutch ceremonies, first effects came after one to two hours and the whole day ran 10 to 17 hours depending on extra helpings [7]. In the controlled Basel study of pure mescaline, effects lasted from about 6.4 to 14 hours depending on the amount and were tracked for up to 30 hours [11]. ICEERS says effects can take up to two hours to begin, so people may mistakenly take more [16].

Effects can also come late and run far longer than the usual span; a case report is described under Toxicity and the Mind. Someone should stay with you well past the point you feel finished.

About San Pedro and Peruvian Torch and Their Effects on the Body

How It Works in the Body

Mescaline acts mainly as a partial agonist at the serotonin 2A receptor, and ketanserin, a drug that blocks that receptor, markedly reduced and shortened its effects in the Basel study [11][19]. In the Basel work its half-life was about 3.5 hours, and a Wikipedia summary gives 3.6 hours and says an older figure near 6 hours was probably inflated by small samples [11][13][19]. The long effect compared with LSD comes from slow uptake and onset, not slow clearance [19].

These cacti carry more than mescaline. San Pedro lists include tyramine, hordenine, 3-methoxytyramine, anhalonidine and anhalinine, among others [1][4]; lophophine, lobivine

and MDPEA are described as entactogenic, and DMPEA can inhibit monoamine oxidase [7]. Peruvian torch is reported to contain tyramine, 3-methoxytyramine, 3,4-dimethoxyphenethylamine and, in small amounts, 2-chloromescaline [4]. Bolivian torch is reported to contain mescaline, tyramine, 3-methoxytyramine and 3,4-dimethoxyphenethylamine [4]. Tyramine matters for one practical reason: with some MAO inhibitors it can raise blood pressure sharply, and TripSit strongly discourages that combination [18]. Hordenine is a related alkaloid that a review links to blood pressure rises in cats, not shown in people [13]. The cactus is a mixture, and controlled studies of pure mescaline may not predict it fully.

How Strong Is the Plant

Very uneven. The 2010 study measured mescaline in the dried outer green tissue of 14 plant types and found a range from 0.053 percent to 4.7 percent of dry weight, about two orders of magnitude [5]. The highest was an E. pachanoi from Matucana, Peru, and the two highest among plants with documented shamanic use came from Peru; most low-content types had no documented ritual use, and informants say several types are used interchangeably [5]. Two E. pachanoi plants from the same seed source differed by more than a factor of two (1.2 and 0.54 percent), so even siblings are not alike [5]. The authors say age, season, time of day and growing conditions were not controlled and that they probably overestimated content for the whole stem, because only the green tissue was tested [5].

Peruvian torch is often described as ten times stronger than San Pedro. The same authors call that a common error: their E. peruviana measured 0.24 percent, E. pachanoi measured considerably more, and earlier published values for E. peruviana run from none detected to 0.82 percent [5]. ICEERS also reports similar mescaline in the two [16]. Erowid says claims up to 10 percent for Peruvian torch appear in the literature and that 1 to 3 percent is more believable [4]. Any number sold with a cutting is a guess.

Bolivian torch has a reputation for being the strongest of the three. Wikipedia says anecdote and lab hints point that way, that content varies a lot between specimens, that some weaker specimens measured about 0.56 percent while some San Pedro cultivars exceed 2 percent, and that the claim has not been confirmed in published analyses [2]. Because strength is unpredictable, a large piece of any of these cacti can be a much bigger amount of mescaline than the same piece from another plant.

Where the mescaline sits matters too. Erowid reports that most of the alkaloid is in the outer centimeter, concentrated in the green tissue beneath the skin, with little in the adjacent white tissue and almost none in the woody core [4].

Heart, Blood Pressure and Body Temperature

Mescaline is a sympathomimetic, which means it pushes the body the way adrenaline does: faster heart, higher blood pressure, wider pupils, sweating and a raised temperature. The DEA lists these along with headache, muscle weakness and poor

coordination [13][22]. Case descriptions of poisoning add tremor, hyperreflexia, agitation, muscle stiffness and a rare compensating slow heart rate [13].

The best numbers come from a pooled Basel analysis of 48 healthy volunteers who took pure mescaline in a clinic across 96 sessions. Systolic blood pressure passed 140 in 38 percent of sessions and 160 in 2 percent, with a highest reading of 166; diastolic passed 90 in 36 percent and 100 in 6 percent, with a highest of 105; heart rate passed 100 in 3 percent, with a highest of 108; tympanic temperature passed 38.0 C in 5 percent, with a highest of 39.0 C and no case above 40. Blood tests of liver, kidney and blood counts did not change meaningfully, and no serious adverse events were recorded [12]. The authors call these effects moderate and caution that people who are older or have medical conditions could respond differently [12].

Those were screened, healthy young to middle-aged adults who took a measured pure compound in a monitored room, with nausea as the limiting problem. A person with uncontrolled blood pressure, heart disease or a rhythm disorder is outside what has been studied, and a cactus brew may add tyramine and other amines [4][12].

Nausea and Vomiting

Heavy nausea is part of the expected course with plant material. ICEERS says the preparations taste bitter and unpleasant, nausea and vomiting are common, and decoctions can also cause purging, which traditional settings treat as part of the work [16]. The toxicology review says nausea, vomiting and loss of appetite are inconsistently reported and are probably due to the bitter taste more than to mescaline itself [13]. In the Basel study of pure mescaline, though, nausea was the main limit at the highest amounts, and ketanserin reduced vomiting, which points to a receptor role [11][12].

Vomiting is more than unpleasant. Severe retching has torn the esophagus (Mallory-Weiss tears) in documented cases of peyote and mescaline use, and vomiting while drowsy or lying flat carries an aspiration risk [13][19]. Dehydration from vomiting and sweating adds strain to a body already pushed the way a stimulant pushes it.

Toxicity and the Mind

Overdose and deaths. The toxicology review says poisonings are mostly mild and usually resolve within 24 hours, and that it would be very hard to eat enough to cause death; it also says exposure often goes unconfirmed, because blood tests for mescaline are not widely available and peyote or mescaline may be missed on routine drug screens [13]. PsychonautWiki and TripSit say they know of no human deaths from swallowing it [17][18]. Wikipedia describes one death linked to mescaline through peyote (probably from choking on vomit), a fatal fall from a cliff, and an unverified death from an intravenous injection [19]. These are weak sources for deaths.

Prolonged psychosis and catatonia. Hallucinogen-induced psychotic disorder is rare (under 1 percent of classic psychedelic users, per Wikipedia) and is a medical emergency [19]. The review notes case reports of a prolonged schizophrenia-like state after chronic

mescaline use, and says a study of Native American Church peyote users reported no lasting psychological or cognitive loss, while cautioning that it may not apply to people using in other ways [13]. A case report describes a 41-year-old man who drank San Pedro tea and ate cactus paste at a group ceremony and felt nothing during it. About 9.5 hours later he developed intensified colors, disorientation and hallucinations, and about 40 hours after taking it he reached an emergency department largely unresponsive. He was treated for catatonia, recovered with supportive care and an antipsychotic, and was well at two months; the authors caution that one case cannot establish cause [23].

Seizures. PsychonautWiki says seizures are rare and tied to predisposition, dehydration, fatigue, undernourishment or overheating, and marks that statement citation needed [17]. The poisoning picture in the review includes seizures [13].

Lingering effects. In the pooled Basel data, flashbacks were reported after about 2 percent of sessions, with no lasting perceptual changes [12]. The review does not link religious peyote use to flashbacks [13].

Spines, skin and eyes. Cactus spines can cause injury and a few people react severely to them [3]. Wear thick gloves and eye protection when you cut, cut away from your body, keep cuttings away from children and pets, and wash your hands before touching your eyes.

Dried and stored material. The review lists botulism from improperly stored peyote buttons among the rare serious effects [13]. Cooked plant juice is a wet, low-acid food and can spoil like other cooked plant foods, so a brew that smells off, tastes sour, looks cloudy or fuzzy, or has sat out is not worth drinking. One abstract reports that the longer cactus is stored, the higher its content of mescaline-derived alkaloids, which is one more reason dried material is unpredictable [9].

Misidentification. The plants grow in several look-alike forms, hybridize and are sold under the wrong names [4]. Strength varies widely across the types tested (see How Strong Is the Plant), and the weakest type was so low that the authors say an impractically large amount would be needed to feel anything [5]. Some columnar plants are not cacti at all: the milky sap of a columnar Euphorbia such as Euphorbia ingens is a dangerous irritant that can injure the eyes and skin and cause poisoning if swallowed [24]. If you did not grow the plant or watch it harvested, you cannot know it is what the label says. The Peruvian resolution also names a wild plant (San Pedro cimarron) used for harm, which is another reason to be wary of wild material and unknown hands [6].

Legal Status

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Federal

Mescaline is a Schedule I controlled substance (21 CFR 1308.11(d)(24), DEA code 7381), and peyote is listed separately at (d)(26), code 7415 [25]. The heading of paragraph (d) reaches any material, compound, mixture or preparation that contains any quantity of the listed substances [25]. The living San Pedro cactus is not named in the list, and the Controlled Substances Act does not mention it [25][14][26].

Where the line falls is less settled than people say. A plant seller and a legal information site describe it as drawn at preparation: owning a living cactus for decoration is generally not treated as a drug offense, while cutting, drying, blending, boiling, powdering or extracting it to consume may create a material that contains mescaline [14][27]. Erowid's older (2003 to 2004) legal analysis says the same and points to a case in which an Illinois man pleaded guilty to state charges for selling dried powdered cactus [26]. Selling cactus with information about psychoactive effects is described as the riskiest conduct [26][27].

The federal peyote exemption for Native American Church ceremonies covers peyote only, not San Pedro, and a statement on one site that it covers San Pedro is wrong [14] [21]. Religious exemptions for other groups are narrow and case by case [27].

Colorado

Colorado's Natural Medicine Health Act (Proposition 122, passed 11/2022) names mescaline, with an exclusion: it does not include peyote (Lophophora williamsii) or its seeds, extracts and derivatives. Synthetic versions and synthetic analogs are also not natural medicine under the compiled statute [15]. For adults 21 and older, state law says that possessing, consuming, sharing, cultivating or manufacturing natural medicine for personal use and without payment does not violate state law or local ordinances. Personal use includes the amount needed to share with another adult 21 or older in counseling, spiritual guidance, community healing or supported-use settings [15].

As the compiled statute reads, cultivation is meant for a dwelling, its curtilage and structures not open to the public; growing more than 12 by 12 feet in total is a drug petty offense with a fine up to $1,000 unless local law expressly allows more and the plants are in an enclosed, locked space; growing outside a locked space is also a petty offense unless the grower is 21 or older inside a dwelling that meets the lock rules, and landlords and property owners may prohibit or regulate cultivation [15].

Bona fide harm reduction or support services may involve payment if there is no advertising and the provider states they are not a licensed facilitator [15]. Sale, business or commercial distribution and giving it to anyone under 21 are not protected, and neither is public display or consumption; lawful consumption is not a defense to offenses involving vehicles, machinery or other devices [15]. Colorado's protection is state law only; federal law is unchanged and stays in force in Colorado [28].

The regulated program (healing centers and facilitators) began with psilocybin. The Natural Medicine Advisory Board may recommend adding other substances, mescaline

among them with peyote excluded, from 2026 onward [28]. The state pages read on 10/28/2026 list no mescaline addition [29][30]. Colorado House Bill 26-1325 creates an ibogaine research pilot and does not touch mescaline [28].

Contraindications

This section lists the medicines and conditions that are reasons to avoid mescaline cactus or to take extra medical care first. Evidence key: CT means controlled trial data, CASE means case reports, REPORTS means self-reports or community experience, and THEORY means expected from the pharmacology with no report found. Almost no formal drug-interaction research exists for mescaline in people, so most flags below are REPORTS or THEORY. Facilitators of the Dutch ceremonies screened out people on psychopharmacological medication (SSRI antidepressants and ADHD stimulants are named), people prone to psychotic breaks, acute addiction, pregnancy, high or low blood pressure, a history of epileptic seizures, kidney or intestinal disease, diabetes and allergy to mescaline cacti, and consulted medical professionals about contraindications [7]. Do not stop a prescribed medicine on your own; talk to the prescriber first, since stopping can carry its own risk.

Medications

MAO inhibitors (phenelzine, tranylcypromine, moclobemide, selegiline) and plant MAO inhibitors (harmine, harmaline, Syrian rue, Banisteriopsis caapi). TripSit advises against irreversible MAOIs, partly because tyramine in some mescaline cacti can interact with them; it also notes anecdotal reports of combining with reversible MAOIs and harmala brews, which change the experience, and PsychonautWiki lists MAOIs as an unexplained dangerous combination. The review says MAO inhibitors reduce the breakdown of mescaline [18][17][13]. Strong flag. REPORTS and THEORY.

Lithium. TripSit says combining it with mescaline is not advised [18]. Seizures are part of the poisoning picture [13]. Strong flag. REPORTS and THEORY.

Tramadol. PsychonautWiki lists seizure risk because both lower the seizure threshold [17]. Strong flag. REPORTS and THEORY.

Stimulants (amphetamine, methylphenidate, cocaine, caffeine in large amounts). Mescaline potentiates stimulants, and users report more anxiety and thought loops; TripSit says any stimulant would need to be much reduced, which reads as a reason to avoid them [17][18]. Mescaline already raises heart rate, blood pressure and temperature [12]. Strong flag. REPORTS and THEORY.

Antidepressants (SSRIs, SNRIs, tricyclics, mirtazapine, trazodone, bupropion). Tripsitter lists antidepressants among medicines to avoid, a weak source, and an antidepressant may flatten the experience while the risks of stopping it remain a separate matter [21]. Bupropion lowers the seizure threshold, which adds to the seizure concern under Conditions. Moderate flag. THEORY.

Antipsychotics (risperidone, quetiapine, olanzapine, chlorpromazine, haloperidol) and reserpine. Atypical antipsychotics block the receptor and are used to end mescaline effects, and ketanserin blunted and shortened it in the Basel study [11][19]. In mice, chlorpromazine caused marked retention of mescaline in brain and tissues, and reserpine was reported to worsen symptoms [13]. Moderate flag. CT (ketanserin) and THEORY.

Benzodiazepines and barbiturates. Wikipedia says barbiturates may reduce anxiety and the review lists sedatives among treatments for psychotic effects [13][19]. They may blunt the experience. THEORY.

Blood pressure medicines and beta blockers. Tripsitter lists blood pressure and heart medications among things to avoid, a weak source [21]. Because mescaline raises blood pressure, a person on these medicines and a person on none carry different risks, and a prescriber needs to be part of the decision [12]. THEORY.

Conditions

Heart disease, high or low blood pressure and rhythm problems. Wikipedia lists severe cardiovascular disease among the reasons to avoid it, ICEERS names cardiovascular disease, especially with related medication, and the Basel data show blood pressure above 140 in over a third of sessions among healthy adults [12][19][16]. Strong flag. CT and REPORTS.

Psychosis, schizophrenia, bipolar disorder, or a close relative with one; suicidal thoughts. ICEERS lists psychotic disorders and bipolar disorder, along with suicidal thoughts, as reasons for caution outside a clinical context because of the risk of decompensation, and Wikipedia and Tripsitter agree [16][19][21]. Strong flag. REPORTS and CASE (the prolonged psychotic and catatonic reports) [13][23].

Seizure disorders (epilepsy). Wikipedia lists epilepsy, and the poisoning picture in the review includes seizures [13][19]. Strong flag. REPORTS and THEORY.

Pregnancy and breastfeeding. Wikipedia lists pregnancy among the reasons to avoid it. The review says mescaline crosses the placenta in monkeys, and no fetal harm has been reported with peyote use in pregnancy, which is thin evidence and not reassurance [13] [19]. Strong flag. THEORY.

Stomach and digestive conditions, and a history of severe vomiting or esophageal problems. Tripsitter says raw cactus can irritate sensitive guts, and the review links violent vomiting to esophageal tears [13][21]. Moderate flag. REPORTS.

Diabetes and kidney disease. Screened out by the Dutch facilitators [7]. Moderate flag. REPORTS.

Dehydration, exhaustion, undernourishment and eating disorders. PsychonautWiki ties those states to seizures [17]. Moderate flag. REPORTS and THEORY.

Being alone, driving, or caring for others. The effects last many hours and can leave a person unable to drive or operate machinery. Plain safety, outside the medical conditions above.

Food and the Diet

Facilitators in the Dutch study asked people to eat plainly in the days before, with less processed food, salt and sugar and, for some, fasting or a vegan diet [7]. Tyramine in some of these cacti is the reason MAO inhibitors matter; see Medications [18].

Other Substances and Combinations

Combinations of medicines get their own document with a large warning at the top; below is the short version for San Pedro and the torch cacti. Almost all of the evidence is community level.

Cannabis. PsychonautWiki lists it with unexpectedly strong and unpredictable synergy [17]. The catatonia case had a positive THC screen, which proves nothing about cause [23]. Two of the Dutch ceremony organizations allowed cannabis alongside the cactus for people who already used it, which the authors say makes it harder to say what comes from San Pedro [7].

MAO inhibitors and harmala plants. Sometimes called peyohuasca in community writing when harmala plants are added to mescaline cactus, said to potentiate it; Wikipedia says it is unclear whether MAO inhibitors increase the effects and that no clinical studies exist, while TripSit warns that tyramine in some cacti can interact dangerously with irreversible MAOIs [19][18]. See Medications.

Other psychedelics. Cross-tolerance means one psychedelic lowers the effect of another for days (see Addiction and Misuse). PsychonautWiki lists 5-MeO tryptamines and AMT among its unexplained dangerous combinations [17].

Other plants in the same brew. Tobacco, ayahuasca and Brugmansia are covered under How It Is Taken; see the Ayahuasca and Deliriant Plants sheets for those plants.

Addiction and Misuse

Physical dependence has not been shown. The toxicology review says addiction and dependence with mescaline are practically absent, with no evidence supporting them, and PsychonautWiki calls it not habit-forming, though that line has no inline citation [13][17]. No withdrawal syndrome is described in either. Most respondents in a survey of 452 mescaline users had used it rarely, and the authors describe a low potential for abuse [10].

Tolerance builds quickly, in a few days of use, and passes after about 3 to 4 days without it by one account, or falls by half in about 3 days and reaches baseline in about 7 by another [13][19][17]. Mescaline shows cross-tolerance with LSD and psilocybin, so a recent dose of one makes the others weaker [13][17]. There is no evidence of acute tolerance within a

single session [19]. A repeat dose in the same day after you think nothing is happening is a common error with a slow-onset brew [16].

Addiction means loss of control, craving and use that continues despite harm, often with withdrawal. Misuse means use that raises risk or causes harm: using alone, mixing with stimulants or other drugs, using to avoid feelings, using during a mental health crisis, or going back for a bigger experience because the last one felt too small. Mescaline's pharmacology does not push toward compulsive use, so misuse here is mostly about context and amounts, and it deserves honest looking when a person starts leaning on it to escape.

Testing and Purity

What Is Really in the Product

For a living cactus the question is less about adulteration and more about identity and strength. Which species it is, which part you are using, how old the plant is and how much mescaline it makes can differ widely (see How Strong Is the Plant), and no label on a nursery plant tells you that [5]. Purified powders sold as mescaline are the form where substitution is reported: Tripsitter names NBOMe adulteration as the main danger of powder capsules, and PsychonautWiki says products sold as mescaline may be 2C drugs, DOx drugs, NBOMe drugs or other research chemicals (marked citation needed) [17][21].

Test Kits

Reagent kits show whether a sample reacts as expected. They can flag a problem, but they cannot confirm what a drug is or how strong it is; a sample with no unexpected reaction is not proven pure; the test destroys the small portion tested; and no reagent can detect fentanyl [31]. Reagents also cannot tell you how much mescaline is in a piece of cactus.

Laboratory Testing

Transparency Testing runs mail-in analysis by FTIR, LC-MS, NMR and NIR and says it accepts natural plant and cactus material, powders, pills, blotters and extracts; it does not accept liquids, so a brew is out [32]. DanceSafe says it knows of no US walk-in site for confirmatory lab testing such as GC/MS, and that DrugsData is not accepting submissions now [31]. In Colorado the statute lets a person test natural medicine for an adult's personal use with a written statement that they are not state licensed and a signed personal-use statement from the person submitting it [15]. Even a lab result on a piece of cactus applies to that piece, and the next cutting from the same plant may differ [5].

Sourcing, Respect and Cultural Context

Because this is a living plant with a living tradition, sourcing is part of harm reduction, to others as well as to yourself. If you are outside the tradition, you are borrowing from a practice that belongs to particular people, in a place where the plant is under strain. Asking where the plant was grown, who harvested it, how it was prepared and who was paid is part of reducing harm.

A Peruvian practitioner told an interviewer that the 2022 heritage designation was welcomed, and that it protects the knowledge of the tradition while the wild plant has no matching protection: wild cacti remain under pressure from cattle ranching, farming, poaching, mining roads and overharvest, local harvesters are paid very little compared with the prices charged in Cusco and abroad, and some San Pedro leaves the country as powder and chips. He argues that growing your own plant, and asking where any brew came from, does more good than buying wild-harvested material, and that traditional ceremonies happen at night while daytime ceremonies came from tourism businesses [8]. That is one practitioner's view.

Peru's own declaration protects the knowledge and traditional use in the north and separates ritual use from recreational use and from what it calls mystical tourism [6]. A cactus grown from a cutting in your own garden or a nursery asks less of that landscape than wild-harvested powder, and a nursery is a place to ask where the stock came from [8].

Preparation and Integration

No dosing or timing numbers are given here. Those are left to the sources and a medical provider.

Before

Read the Contraindications first, especially a personal or family history of psychosis or bipolar disorder, heart or blood pressure conditions, seizures, pregnancy and any medicine that lowers the seizure threshold or is an MAO inhibitor or lithium. Meet with a psychedelic-informed physician; blood pressure and your full medicine list are the kind of thing they can check. Do not stop a medicine on your own.

Plan for the length of the day and the night after it: a plan for the whole span, not just the peak. Eat lightly and stay hydrated before, as PsychonautWiki links dehydration and undernourishment to seizure risk (a community source) [17]. In the Dutch study, facilitators recommended preparing in the days and weeks before by eating plainly, avoiding sex, screens, alcohol and other drugs, and spending time alone reading, walking in nature and meditating [7].

Choose a place where you can be sick and can lie down safely, a sober person who stays through to the end, and a way to be reached without driving. Know what the plant is, where it came from and how the material was prepared [5][8]. Decide ahead of time that

you will not take more because it seems nothing is happening, since onset can be slow [16].

Expect heavy nausea and plan for it: a bucket within reach, someone to hold hair and water, no lying flat on your back if you are drowsy and vomiting, a clear path to the bathroom. In the tradition vomiting is part of the work, and it is a medical risk if it will not stop [16][13]. Keep spines and cutting tools out of reach of anyone intoxicated. A sitter should be sober, stay, speak simply, stay out of arguments with what the person says they see, and call for help if any sign under Warning Signs appears [33].

Choosing a Facilitator

If you are considering a ceremony led by someone else, a few questions are worth asking out loud: whether the leader has been trained in a lineage and by whom, where the cactus came from and how it was prepared, who is present and who stays sober, what the plan is if someone has a medical emergency, and whether the people leading the work have any connection to the communities where the tradition lives. A good answer from a leader is not proof of safety, since commercial San Pedro retreats have not been studied. In the Dutch study, ceremony teams screened participants with questionnaires, worked with medical professionals on contraindications, and had a leader and one or more guides present [7].

After

Plan for a long tail. After-effects can run well past the main effects, and a delayed, very long course has been reported [17][23]. Drink fluids, eat simply, avoid more substances, do not drive until you feel clear, and tell a trusted person how it went. The experience can raise hard material, and a counselor who understands this work, or the Fireside Project, can help if it lingers [33].

If You Need Help Now

In a medical emergency, call 911. If you are in emotional crisis, you can call or text 988. Fireside Project has trained volunteers who talk with you by phone or text during and after a psychedelic experience, and DanceSafe sells kits for testing what you hold.

Warning Signs

Call 911 for a seizure. Do not put anything in the mouth, move hard objects away and note the time. Call 911 for chest pain, severe palpitations, shortness of breath, fainting or a very high temperature with confusion or rigid muscles, since mescaline raises heart rate, blood pressure and temperature, and the poisoning picture includes muscle stiffness and seizures [12][13].

Call 911 for unconsciousness, being hard to wake, choking, vomiting while lying flat or trouble breathing, and place a breathing person on their side. Call for vomiting that will not stop, blood in vomit, or severe pain in the chest or upper abdomen after retching, since

tears of the esophagus are documented [13]. Call for extreme agitation, aggression or danger to self or others.

Get medical help the same day for someone who sits motionless, does not speak or respond, or resists being moved or having their eyes opened for hours after the effects should be fading; the catatonia case described under Toxicity and the Mind reached the emergency department long after the cactus was taken and recovered with treatment [23]. Get help too for confusion, strong paranoia or hallucinations that continue well beyond the usual span, or that return days later [13][23].

While you wait, stay with the person, keep them from driving or going outside, speak simply, keep them cool if overheated, give nothing more to drink if they are drowsy or vomiting, and gather the plant material, any brew and its container, and the names of other things taken, to show responders. If breathing stops, start CPR as the 911 dispatcher directs [34]. These are standard first aid steps.

For suicidal thoughts, call or text 988, any hour [35]. Poison Help at 1-800-222-1222 is free and confidential [34]. Fireside Project at 62-FIRESIDE (623-473-7433) is open daily from 11 a.m. to 11 p.m. Pacific time, which is noon to midnight Mountain time. Its volunteers are trained peers rather than clinicians, and it is not a medical service or a suicide line [33].

Where to Find More Information and Support

Amounts, timing and combinations are best checked against these sources and with a medical provider, because they are updated more often than this sheet. Erowid, TripSit and PsychonautWiki include user reports and community writing, so read them as experience as well as research.

Erowid: https://erowid.org

DanceSafe: https://dancesafe.org

TripSit: https://tripsit.me

PsychonautWiki: https://psychonautwiki.org

Zendo Project: https://zendoproject.org

Fireside Project: https://firesideproject.org

MAPS: https://maps.org

Poison Help: 1-800-222-1222

For San Pedro and Peruvian Torch Questions

ICEERS, a nonprofit that publishes plant medicine education: https://www.iceers.org/san-pedro-basic-info/

Chacruna Institute, on plant medicines, ethics and reciprocity: https://chacruna.net

Transparency Testing, mail-in lab analysis: https://www.transparencytesting.com/

Colorado Division of Natural Medicine: https://nmd.colorado.gov/

Erowid cacti vault, a community reference (older legal pages are outdated): https://erowid.org/plants/cacti/

Mailing Lists

Erowid Monthly, a free email list: https://www.erowid.org/about/about_announcements.shtml

Erowid Extracts, the members' newsletter: https://erowid.org/membership/

MAPS email newsletter: sign up at https://maps.org

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