Mescaline For The Masses

by Alembic 23, with edits by Mambo Pachano

The following "kitchen extraction" approach is something anyone can do, without requiring solvents more dangerous than alcohol, without strong acids or bases, and without any specialized knowledge of chemistry. The end product can be easily measured, and consumed by mixing it into half a glass of fruit juice.

Start with a material of known quality, in order to create an extraction that produces multiple doses of a standard potency. If you have not previously used the cactus that you will be extracting, roughly "standardize" a batch of dried material, using the chopping process described below, and do some bioassays in order to loosely determine the potency of your material before proceeding further. For the purpose of describing the extraction procedure, we will use a hypothetical *Trichocereus* plant material wherein 25 grams of the dried outer flesh is known to be fully active. We will use 250 grams of material, with ten doses as our target.

MATERIALS

- 250 grams of dried *Trichocereus*
- a large kitchen knife
- needle-nose pliers
- a one-liter bottle of 190 proof ethanol[1]
- a half-gallon glass canning jar with lid, or two or more quart glass canning jars with lids
- unbleached muslin or a straining bag
- a large glass baking dish
- a fan
- a glass measuring cup
- a one-pint glass canning jar with lid
- masking tape
- an alcohol-safe spatula
- a funnel
- a tablespoon[2]

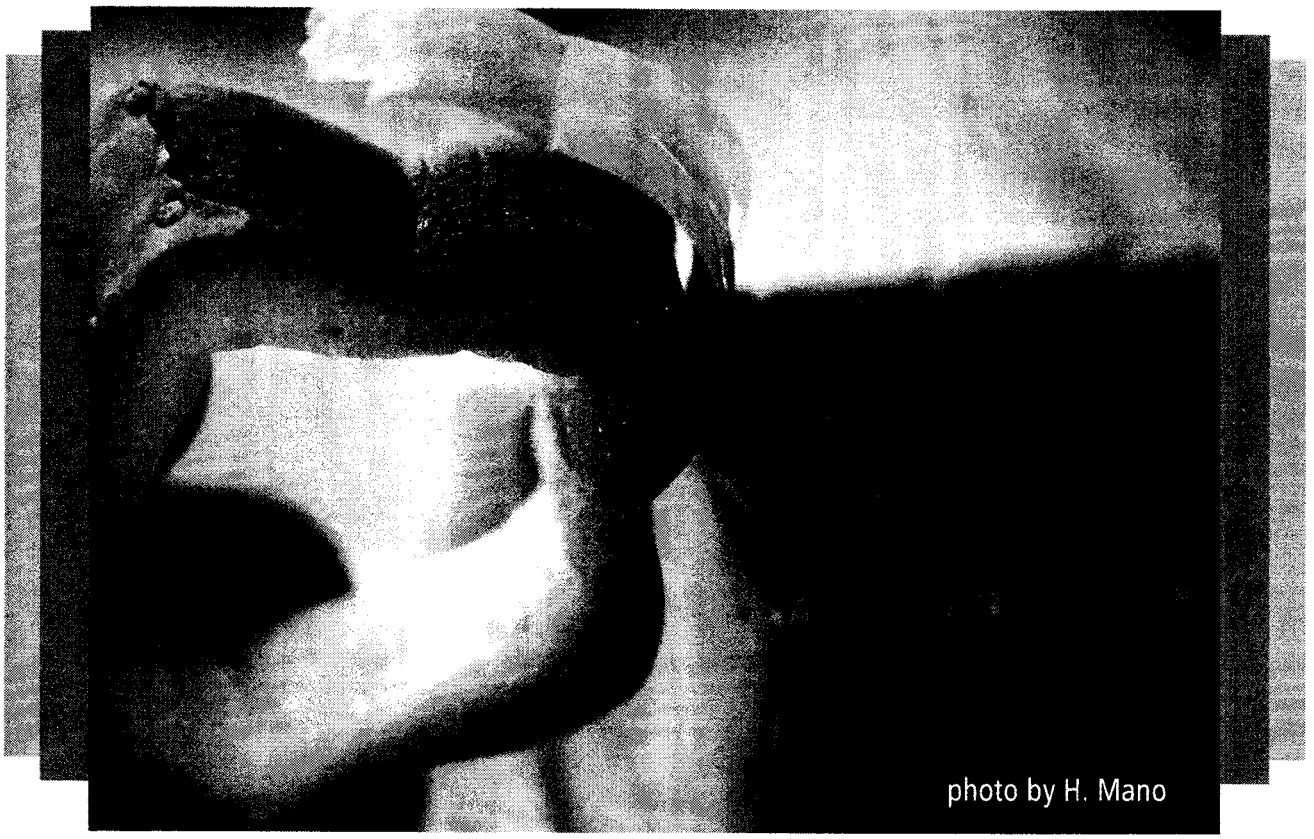

photo by H. Mano

PREPARATION & EXTRACTION

Using high-potency strains is preferred—this requires less material and solvent, and reduces the amount of processing time. If starting with fresh *Trichocereus*, remove its spines and the waxy translucent cuticle-like skin before it is dried. This cuticle can be separated from the fresh green flesh using a knife blade or with needle-nose pliers; one can slide a knife right under and against the cuticle, to free it from the green flesh. Removing the cuticle prevents its triterpenoids, sterols, and waxy materials from being included in the extraction, resulting in a product that is cleaner and easier to work with.

Then core the cactus, as only the green layers closest to the outer surface of the cactus should be used. Once the cuticle is removed and the cactus is despined and cored, cut the green outer layers into thin slices and allow them to dry. The slices can be air-dried on a windowscreen, without using any direct heat; or, some people have reported good results using a food dehydrator at a low temperature setting.

High-potency dried cactus flesh from several psychoactive *Trichocereus* species that has already been prepared in the manner described above can currently be purchased from a number of on-line vendors worldwide (despite the problematic legal issue of such a product potentially being considered a "mixture or preparation that contains mescaline" in some countries). It is generally inexpensive and saves a lot of time and effort in preparation. Be aware, however, that not all of the cored and dried product available commercially has had its cuticle removed.

Chop the dried *Trichocereus* into small pieces. The resulting particles should range in size from chopped tea leaves (on the small end) up to about ¼" across (on the large end). A fine powder should be avoided, as it will hinder filtration, turning the whole process from easy to difficult. Place the processed dried material into the half-gallon glass canning jar, or distribute roughly even amounts into two or more quart glass canning jars. Multiple smaller jars are easier to handle and shake than a single large jar.

Now fill the jar(s) to the point where there is 0.5–1" of alcohol above the saturated cactus material, and then shake well. Do not use alcohol that is lower than 190 proof. With alcohol that is less than 95%, unwanted components from the cactus can more easily dissolve in the water and adversely affect reconstitution and palatability of the final product. The preferred solvent for this recipe is 190 proof drinking ethanol, since nothing more toxic than the alcohol itself needs to be evaporated off. Do not use denatured alcohol, as its toxic additives may not completely evaporate and should not be consumed.

Store the glass jar(s) in a cool, dark place, allowing the material to soak for 28 days. Shake the container(s) once a day for the first week, every other day the second week, twice the third week and once at the beginning of the fourth week.

At the end of the fourth week, strain off the liquor. Pour the depleted material (known as the "marc") into a clean piece of unbleached muslin or a straining bag, squeeze out the liquor remaining in the marc, then add it to the rest of the liquor. If any solid materials come through the filter cloth or are otherwise present, let the liquor settle and then decant the solution; it is important that it be free of any particulate mater.

Pour the extracted liquor into a glass baking dish and evaporate off the alcohol using a fan. Turn on the fan first, set at a slow speed, and then carefully place the dish in front of it, making sure that the fan does not blow the liquid out of the dish. All that is needed is a steady stream of air across the top of the dish. Evaporate off all of the liquid, until only a gooey residue remains. The alcohol will evaporate first, leaving any water to evaporate more slowly. However, twenty-four hours is usually enough time to evaporate off both the alcohol and the water.

TINCTURE PRODUCTION

Next you will be using a measured amount of 190 proof alcohol (15–30 ml)[3] for each dosage unit you intend to create. In our case, we will be using 15 ml (one tablespoon) per 25 grams of starting material, meaning that we need 150 ml (ten tablespoons) of fresh alcohol to create ten doses.

Take the one-pint glass canning jar (which you will ultimately be storing the elixir in), add 150 ml of alcohol to it, and mark the level with a piece of masking tape to indicating the total volume. Then pour the alcohol into the glass measuring cup.

Add half of the alcohol from the measuring cup to the residue in the baking dish and dissolve it by gently stirring with an alcohol-safe spatula or other inert tool. It may take around five minutes to completely dissolve the residue; be patient and thorough. Using a funnel, carefully pour this into the one-pint glass canning jar that you marked with tape.

Now add a bit more of the remaining alcohol to the baking dish to wash out whatever remains, and then pour this into the one-pint glass canning jar that contains the extract. The dish should essentially be clean at this point.

This approach to redissolving is suggested because the total of the alcohol *combined with the residue* would be greater than the desired final volume if the entire 150 ml of alcohol had been added. Now you need to add just enough of the remaining alcohol to bring the total volume in the bottle containing the elixir up to the tape line that you marked earlier. Cap the bottle, shake well, and you are done. There are now ten single-tablespoon doses in the bottle.

STORAGE

It is presently unclear how long the final product will retain its potency when kept in a cool, dark place. Some number of months seems likely, and a few weeks has already been well-established. Storage in a refrigerator or freezer should increase the length of time that it would remain at full potency.

OTHER PLANTS

This extraction method should work with many different plants and targeted components. However, when using something other than *Trichocereus*/mescaline, one should be certain that the plant's active components are soluble in ethanol; if they are not, the extraction produced won't be psychoactive. In a case where the target compound is soluble in water but not ethanol, 70% ethanol (140 proof) can be used as the solvent. The water content will dissolve the active compound into solution and the ethanol will help to preserve it. Be sure to also use 70% ethanol when reconstituting the extracted residue, so that the active compound will go into the solution.

Seventy percent ethanol is also a great choice when one is extracting a plant material that contains both water soluble *and* alcohol soluble components, such as *Cannabis*.[4] If this is used for *Cannabis*, a standardized solution of 1 gram per 1 ml can easily be made. Such a product can simplify the production of cooked foods prepared for oral consumption of *Cannabis*. Due to lack of heating during the extraction process, a *Cannabis* elixir produced via this method will only be trivially active until it is cooked, since the THC molecule contained in the dried plant is bound to a carboxyl group, and it needs to be heated to lose this and become psychoactive.

FOOTNOTES

1) 190 proof neutral grain alcohol (95% ethanol, 5% water) intended for drinking is sold under the brand names EVERCLEAR™, CLEAR SPRINGS™, and others. In the USA, a number of states, including California and Nevada, prohibit the sale of 190 proof ethanol for drinking. A quick trip across the border into Mexico can provide legal access, if you declare the purchase when you return and pay any required taxes. Or a friend living in a state where it is available might consider bringing it to you. However, note that in some states it is illegal to import even "personal use amounts" of alcohol from another state. It is also worth pointing out that it is illegal to mail flammable liquids via the USPS. The company ALCHEMICAL SOLUTIONS, a certified organic micro-distillery located in Ashland, Oregon [www.alcsol.com], will sell 190 proof alcohol—for use in the production of tinctures, cosmetics, and perfumes—to any state in America (although a few states, such as Oregon, Washington, and Vermont, require additional paperwork to be completed). A one gallon bottle is $50.00, plus $25.65 for the ALCOHOL AND TOBACCO TAX AND TRADE BUREAU fee, plus any shipping and related hazardous materials transport fees, and the onus is on the customer to be aware of and pay any state tax obligations related to the out-of-state purchase of industrial alcohol.

2) Although a tablespoon can be used for this recipe, a device that holds more liquid, but which still measures in reasonably small increments, may be easier and more accurate to use. Mini Measure® shotglasses, showing conversions between ounces, tablespoons, teaspoons, and milliliters, are available at cooking stores. Even better would be a graduated glass cylinder or a large pipette with bulb, or even a large syringe without a needle; these are variously available on-line from any number of companies selling laboratory equipment, or from many wine and home brewing suppliers. Art supply stores also sometimes carry large disposable syringes for use in dispensing adhesives.

3) The amount of ethanol added determines the strength of the final product. The more ethanol, the weaker the end product by volume. Initially try to make it as strong as possible—you can always thin it out later if needed, adjusting how much is considered "a dose" by increasing the volume of each of your multiples by a standard amount of ethanol per dose.

4) Anecdotal evidence indicates that there are unknown water-soluble compounds in *Cannabis* that contribute to the sedative and antispasmodic effects of the plant. These qualities are desired by some people who take the plant orally for medicinal purposes. However, many recreational users would prefer to avoid these effects; for such users, extracting with 190 proof (95%) ethanol, rather than 140 proof (70%), would be a better choice.