

DMT Quicktek

... a *Mimosa hostilis* root bark extraction tek by *Vortex*

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Commentary

This tech has a couple of new twists which I do not believe are being used by anyone else and those are: To defat the powdered root bark by pouring strait naphtha directly into the powder without water and second, to mix the extraction solvent into basified plant material without first cooking in acidic water and straining the root bark as is found in other techs. No reason to do so, this works great without going to the trouble and has been reported to produce very high yields.

Although heat is not required in any step of this process, if warming the aqueous NaOH basified soup to much over 140 °F. the DMT alkaloid which has become a freebase can start to turn into a vapor causing it to be completely evaporated out of the mix. Because of this, if you want to heat the basified soup be sure that you do not let the soup get any warmer than 100 to 120 °F. to allow a fairly large margin. My advice is that 100 °F is plenty warm enough to help speed the process up if you want to do so but is not at all necessary.

DMT Quicktek for Mimosa Hostilis Root Bark Extraction

The following four short paragraphs are the core of the extraction method which is very simple, the rest is just extra information for those who might be new to extractions. This extraction method can extract the majority of the alkaloid from Mimosa hostilis root bark in less than 4 hours from beginning to end if you have quantity of powdered root bark ready for extraction and speed the evaporation of the extraction solvent through the aid of a fan with the solvent in a large wide flat glass pan. Larger extractions of over 250 grams may take longer due to the time it takes to evaporate a larger volume of solvent.

1. Dimethyltryptamine a.k.a N,N-DMT or DMT which is contained in powdered Mimosa hostilis root bark can be directly extracted with naphtha by adding the powder and solvent together into an amount of basified water at a pH of 13.5 which is made by dissolving a base chemical such as NaOH/sodium hydroxide into water. Basified water which will have a high enough pH to convert the DMT in the root bark powder to a freebase for absorption by naphtha can be prepared by dissolving 1 measured tablespoon of pure NaOH per 150ml of water intended, preparing enough water so that you have close to a ratio of 1/4 root bark powder (when wet) to 3/4 basified water. When the base adjusted water is mixed together with the root bark this will raise the pH to close to 13.5 which is the ideal extraction pH.

2. The sequence the above is done in is important, be sure to make the basified water ahead of time, if the NaOH causes the water to significantly heat due to the chemical reaction let it cool to under 120 °F. and then mix the powdered root bark into the water for five minutes before adding naphtha. Although this extraction can be done with basified water at room temperature, if the water is still warm from the reaction of having NaOH added this will only help but do not add the root bark powder if over 120 °F.
3. Use 100 or more ml (as much as you want) of room temperature naphtha per 250 grams of dry weight root bark being extracted and mix the solvent into the aqueous soup by hand using a non-reactive utensil such as stainless steel for 30 minutes at a time at room temperature to absorb the DMT alkaloid, extracting the watery mix with naphtha the same way at least three or more times over with fresh solvent each time to absorb and pull out the majority of the alkaloid in under two hours. Separate and save the naphtha from the basified mix each time. When finished extracting the root bark evaporate the DMT containing fractions of clear to slightly yellow solvent together to net fairly pure DMT in just a few hours of work.
4. When done with this quick extraction method and prior to evaporating the solvent you have already collected, pour more clean solvent into the soup, mix for a few minutes, tightly cover to prevent evaporation of the solvent and then set aside in a dark place for a long term soaking of a few days to get the last of the alkaloid out of the root bark. If possible, mash and stir the root bark which will have settled to the bottom of the container at least once a day, twice or more a day is better. A stainless steel potato masher works great for this, do not let the basified solution get on your skin.

Extraction Notes

Preparing Root Bark for Extraction

The root bark can be extracted whole without powdering if you are willing to wait for the lye/NaOH to soften and break the root bark down into a mush which will extract just as efficiently as powdered root bark but will take a few days to completely soften enough to do so. Although this is true to reduce the amount of time required to extract this plant material it is best to powder the root bark as finely as you can through simple means. This can be done through multiple steps to break the bark down until you have a powder near the consistency of flour. First, strip and cut the bark into fine pieces with pliers or cutting dikes, tin snip shears etc., then place all of the bark in a large enough steel can so that when filled with all of the root bark it is no more than about 1/10 full (coffee cans work great, holding it between your feet) and use a five foot long inch and half or larger OD thick walled schedule 40 or heavier steel pipe to smash the pieces into a powder as you stand above the can and pound the bark into smaller and smaller pieces which will eventually become a powder mixed with harder pieces if you work it long enough. This can only be done if the can is sitting on a flat cement slab, do not try this with the can sitting on a wooden floor, not hard enough.

Once you have thoroughly pulverized the root bark as best you can with a pipe you can then further powder the material or break down the pieces which remain through the use of a small high RPM coffee grinder, the top loading kind which have a stainless steel blade

Crystalline DMT

When solvents containing DMT are evaporated different purities of alkaloid and rates of evaporation produce different crystalline patterns. Depending upon purity, the formations produced can vary from small white raised bumps which may or may not appear to have a crystalline pattern within them to a fine pointed array of delicate crystalline needled formations. Ninety plus percent purity extract, when evaporated out of a solvent and depositing upon glass often produce small but highly defined white crystalline needles which when viewed under intense light will sparkle and upon close examination via high magnification can be seen to actually be without color and completely clear, if pure.

Confirming the Extract is DMT

If your extract will both melt at a temperature close to 120 °F. and then when cooled to room temperature form into a crystalline structure in an hour or two this is also one way to know you have DMT but not the purity. Although you cannot determine purity this way such as whether the extract contains fats or trace amounts of NaOH, none of the chemicals which are used to basify root bark or other plant materials for the extraction of this alkaloid with solvents will melt anywhere near that low of a temperature. Also, DMT has a very particular strong plastic like smell and never dries to a hard state, even when in the pure crystalline form DMT will always be fairly soft and have close to a wax like feel.

This tek is an ongoing edit, adding more information as I can.

and evaporating it, reworking the same way) and let the glass dry for an hour or more so that you can scrape the purified alkaloid off the sides and bottom of the glass for collection. The naphtha you poured off can be evaporated back down and reworked the same way again but will likely be far darker or perhaps a bit more gummy due to the impurities left behind in it.

Another way of purifying the extract is to take, for example, 1 gram of extract and place it in a small glass cup of some kind and slowly not to disturb the spice pour in, for example 50-100ml of naphtha and water bath heat (the same as a regular canning food jar partially submerged in hot water) the solvent in the jar to about 130 °F, but not much hotter or the solvent will begin to hard boil. Once the naphtha is hot enough the extract will begin to melt and bubble to a little bit form a syrup like blob in the bottom of the container. Continue allowing the spice to melt and spread out in the bottom of the jar to form a film covering the entire bottom and lightly swirl the naphtha without touching the goo in the bottom for just a couple of minutes or so. Once most of the alkaloid has dispersed into the solvent and all which remains is a thin yellow fatty puddle in the bottom of the glass carefully pour the solvent off and into another container for evaporation (or freeze precipitation to further purify it if you did not use too much solvent). You might want to add more naphtha to the jar with the slime in the bottom and do it again until you have substantially reduced the amount of goo on the bottom without dissolving much of these fats into the naphtha but each subsequent fraction of solvent will have more of the fatty impurities in it. You do not want to stir it up much when using this method because these gooey fats will eventually dissolving into the naphtha but the alkaloid will dissolve into it much quicker than the fats, that is why this will work to purify the extract.

If you want to recover every little last bit of the alkaloid you can get at from the remaining goo the acid to base defatting process is the thing to do to get the rest of the spice out. The above two methods work great with extract which is not too processed but once you have worked the extract as best you can with the above two methods to purify it the only thing left to do with a heavy goo is to use the A-B method. Simple store bought vinegar can be used to acidify the goo by just dissolving it in the 5% vinegar which has a pH of about 3.5 (this is not pure vinegar, store bought vinegar is only five percent vinegar). The goo will break down very easily in vinegar, stir it with your finger if you like or put it in a small canning jar, warm it in a microwave or a hot water bath and shake it until all of it is dissolved. Once dissolved make sure the pH is still acidic because the spice in the goo, as a base, will tend to neutralize the acid towards base so testing the fluid with pH papers (or taste, if it still tastes acidic like vinegar) to make sure it is still acidic is a good idea. Once you have confirmed the pH is close to 3 or 4 then pour in some naphtha and either stir or shake it for a few minutes to defat the vinegar.

Once the naphtha settles into its own layer floating on top of the vinegar you can pour it off but I would keep it and evaporate it to make sure none of the alkaloid is in it. You could do this a couple or more times over to make sure you have all of the fats out of the vinegar. The alkaloid is turned into a salt in the presence of a strong acid and should not be accessible by the solvent while the fats are, that is how this method works but to get the spice back out you will need to add NaOH/lye to the solution to raise the pH to about 13 or so to be able to efficiently extract the spice with naphtha. That is all there is to it, the A-B process is very simple but be sure the extract the solution a few times over to make sure you have gotten all of the spice back out of it.

in the top which turns at an extremely high speed. These can be purchased from many large stores which sell kitchen items for less than twenty dollars but are not designed for a heavy work load. Because of this you should wait at least a minute between each grind or you might burn the internal thermal fuse out which is not designed to be replaced, but can be done so by removing it which of course defeats this safety feature to prevent fire if an overload occurs.

Defatting without A-B

Although the extract from *Mimosa hostilis* root bark is usually pure enough using the above process as is, if desiring a higher purity the small amounts of fat which are in this plants root bark can be removed by a very simple step without the need to acidify and mix with water as is commonly done using what is called an Acid-Base Extraction. This can be done by adding a solvent such as naphtha directly to the dried root bark powder and stirring for just a few minutes and then once the solvent has absorbed the fats, which takes less than ten minutes, pouring the mix through a paper or cloth filter to collect the fine particles of powdered root bark suspended in the solvent and save the wet powder, discarding the solvent. The wet or dried powder can then be added to a mix of water and NaOH to raise the pH of the water to above 13 where the DMT salts contained in the powder are converted to an alkaloid or base which can then be readily extracted using a solvent such as naphtha to absorb it.

This method will work to defat the root bark using the same solvent which extracts the alkaloid because the DMT contained in the dried root bark is in the form of a salt which cannot be absorbed by the solvent until a base is added with water to the powder which releases it for absorption by solvent. Because of this when doing a strait solvent defat you are in effect using the acid to base or A-B defatting process but without having to add an acid to convert the DMT into a salt because DMT contained in dried root bark already exists in the form of a salt so why use a mix of water an acid to defat the material when mixing the powder into strait solvent does the job so well?

Although *Mimosa hostilis* root bark is already fairly fat free as is and nearly free of fats after performing a simple strait defat of the powder with room temperature solvent, for an extreme defat boil the root bark powder in hot naphtha or any solvent which will absorb plant fats such as xylene etc. and cycle several times, pouring off the old and adding fresh solvent. Some kind of paper or cloth filter should be used to strain the fine particles of root bark powder floating in the solvent each time you do so or you will loose that portion of the root bark to the solvent wash. These particles can be so fine that they can take many hours to settle to the bottom of the container.

Proper Extraction Utensils and Equipment

When extracting root bark do not use plastic containers or utensils which might react with either the solvent or the base chemical. Stainless steel, glass or ceramic containers and stirring utensils are safe with these chemicals. Always wear safety goggles and rubber gloves and observe all standard safe practices when working with chemicals and solvents.

Warning! NaOH Sodium Hydroxide is Dangerous!

When working with NaOH/sodium hydroxide this is an extremely dangerous solution you are making. It can cause serious burns and eye damage; wear gloves and goggles, OK? Also, you will find that this compound generates a *LOT* of heat when it gets wet - so much so that your solution can boil over, spraying NaOH everywhere. Because of this only add and stir small amounts of NaOH base into the water a little at a time to minimize the amount of exothermic heat and bubbling. *NEVER* add water to a base/NaOH! Again, the powdered base should only be added incrementally and slowly dissolved into a relatively large amount of water, not the other way around.

pH – The Basics

If a substance has one acid component for each base component, it is said to be neutral and has a pH value of 7. Greater than 7 is less acid, more base, and less than 7 is more acid and less base. Each unit is 10 times the previous, i.e., a pH of 9 is 10 times more base than 8, a pH of 5 is 10 times more acid than 6. Some examples of more acid like things are vinegar, orange juice, and the liquid in your car battery that makes holes in your clothes. Bases include lye, Tums, and brushing your teeth with baking soda. When acid like substances are mixed with base like substances, they react with each other producing some by-products and leaving the resulting solution with a pH somewhere between the two original values. The further apart the pH of the two substances, the more energy is released in the reaction. Put a teaspoon of baking soda in a half glass of vinegar and see what happens.

pH	Substance
13.0-14.0	Sodium Hydroxide – (NaOH, lye; Caustic Soda)
13.0-14.0	Potassium Hydroxide (KOH, lye; Caustic potash)
12.4	Lime – (Calcium Hydroxide)
11.0	Ammonia
10.5	Milk of Magnesia
8.3	Baking Soda
7.4	Human Blood
7.0	Pure Water – Neutral
6.6	Milk
4.5	Tomatoes
4.0	Wine & Beer
3.0	Apples
2.2	Vinegar (undiluted)
2.0	Lemon Juice
1.0	Battery Acid
0	Hydrochloric Acid

Table 1: Example pH values for various substances

Go to <http://tinyurl.com/o8ow7> for a list of common bases and pH.

bark powder to clog a separatory funnel.

Instead of using a separatory funnel I have found it easier to just use more solvent than I need for each of the multiple extractions done to a single batch of root bark and carefully pouring the solvent in the mixing container off the top and into a large measuring cup allowing some of the watery mix to go out with it. Then I can carefully pour the naphtha in the measuring cup off of the dark aqueous solution in the bottom and add it back once the naphtha has been separated from it.

Evaporating Solvent

Evaporating naphtha can take a very long time if placed in a deep bowl or container. To speed things up use a broad flat glass dish to increase the surface area of the solvent to air as much as possible and place a fan nearby to blow across the top of the fluid to speed evaporation. Never do this in an enclosed room and always have sufficient ventilation, especially if using a fan with their sparky internal commutator brushes.

Purifying the extract

Although many report that the extract from this process can be used as is others have found that purifying the alkaloid is a must do for them. This can be accomplished by running the extract solids through a full acid to base defat or by a couple of other ways. The freeze-precipitation method works fairly well. This is done by dissolving a gram of extract into a small amount of naphtha and placing it in a freezer for a few hours so that the fluid will chill to near 0 °F. causing the solubility of the naphtha to be reduced so far that it will not hold very much of the alkaloid which causes it to deposit on the sides of the container allowing the naphtha to be poured off (saved, evaporated and worked again) to net nearly white colored DMT which is scraped off the sides of the glass. This method will NOT work if you have too little alkaloid per quantity of naphtha vise versa, too much naphtha for the amount of alkaloid dissolved into it. The best way to do this is to prepare some warmed 100 to 120 °F naphtha and then place your extract (i.e. 1 gram of waxy alkaloid) in a small glass or jar and slowly pour in a very small amount of naphtha into the extract, just a little bit, a few ml and then stir the extract into the solvent you have added until it will not longer dissolve any more, adding more naphtha as necessary to completely dissolve the extract but no more than is needed. You want to completely dissolve the extract into the fluid to the point where the naphtha is completely without any kind of cloud to it but not beyond that point. To be sure you do not over shoot keep adding only small amounts of naphtha and continue stirring the extract into it until you reach the point where it has all completely dissolved and do not add any more solvent or this process will not work out as well as it can.

Once the naphtha has become saturated to its maximum amount of alkaloid to the point where it is no longer cloudy seal the container and put it in a very cold freezer. After a few minutes the naphtha will cloud up as the alkaloid starts to precipitate out of the solvent but should not be removed from the freezer until the fluid clears. The cold naphtha can be from clear to yellow colored but should have no amount of cloud to it or the alkaloid which can come out of the fluid has not precipitated out yet. Once the fluid has been chilled to a low enough temperature, and allowed enough time to settle the fluid will become completely translucent. At this point you can then pour the naphtha into another container (saving

you should check it for residuals by evaporating a portion of it in a clean bowl to see if any kind of oily contaminate remains.

The more solvent you use to absorb the alkaloid out of the basified root bark the easier it will be to separate from the aqueous mix each time, leaving some behind which will have its contents diluted into fresh solvent on the second, third or last long term extraction if you choose to do so. While 100ml per extraction of 250 grams of root bark powder when done three times or more over may be far more than is required for the amount of alkaloid extracted, on a solubility basis, more solvent makes separation much easier each time if any amount of emulsion is present. Although in my opinion using more solvent is better in that respect, more will obviously increase the total amount of evaporation time required to net the alkaloid.

Mixing Naphtha and Trouble with Emulsions:

Naphtha has a lower specific gravity than water and will float on top of the aqueous mix of root bark powder, once stirring has stopped. Just stir the naphtha into the mix from a slow to moderate rate to reduce the amount of bubbly emulsion which might form. The problem with having an emulsion is that when it comes time to separate out the solvent from the solution of basified water the more bubbles which form in the solvent the less solvent you can separate out from the aqueous portion of the mix causing some of the alkaloid contained in the emulsion which is a mix of both solvent and water to be left behind. If the pH of the base adjusted water and root bark powder is not high enough mixing too fast will cause an emulsion to form which will not break down on its own even if waiting days for it to subside. At the proper pH of ~ 13.5 emulsions are not easily formed even through fast stirring which will last more than a few minutes after the stirring has stopped. However, a fairly slow to moderate speed stir of the naphtha into the aqueous mix is all you need to do, just fast enough to make sure the root bark powder is not allowed to settle to the bottom of the mixing container while stirring the naphtha into the solution.

Separating the Solvent From The Aqueous Mix

The best tool for this is a separatory funnel which is simply a glass container with a valve on the bottom which will allow the heavier aqueous solution to be poured off of the naphtha floating on top simply by opening the valve. Some individuals use plastic baggies for this purpose by cutting one of the bottom corners out of the bag so that the heavier watery half can be drained off and pinching the bag off with their fingers just as the last of it goes out with the lighter naphtha remaining in the bag which is then drained into another container for evaporation. I do not like the idea of mixing chemicals and solvents in sandwich bags due to possible contamination and refuse to use that method unless I could find some kind of bag I know for sure will not be leached by chemicals or solvents.

This particular extraction process makes using either a separatory funnel or a baggie more difficult for separating the solvent from the mix because the heavy and muddy root bark powder is left in the extraction container which would clog up either of these. If you do use a separatory funnel or homemade device to drain the aqueous solution off of the naphtha from the bottom I would wait for the root bark powder to completely settle to the bottom of the mixing container and then pour the basified water and naphtha off the top into another container but chances are unless you wait many hours you will still get enough of the root

pH Meter or Papers Are Not Required

If you do not have access to a pH meter or papers to confirm how base the solution is the root bark can be basified to a pH of approximately ~ 13 by dissolving 1 tablespoon of NaOH per 150ml of water used to basify the root bark regardless of the quantity of water used but should be added to and thoroughly dissolved into the water prior to mixing into the root bark powder. If a bubbly emulsion forms when stirring the mix together with naphtha add more water with the NaOH base dissolved into it and stir again. Until the pH is close to 13 or more emulsions will form very easily when mixing the naphtha into the MHRB soup, after the pH is raised to close to the ideal pH of approx. 13.5 you cannot easily produce an emulsion by swift stirring but some amount will form and if too much allow the solution to sit for a few hours before the solvent is separated out from the watery mix for eventual evaporation. The emulsion should break up or subside on its own after setting still long enough bit if it will not settle out add more NaOH.

The pH of a solution can be calculated. For example, if 1 mole of sodium hydroxide (40 g) is dissolved in 1 litre of water, the concentration of hydroxide ions becomes $[OH^-] = 1 \text{ mol/l}$. Therefore $[H^+] = 10^{-14} \text{ mol/l}$, and $\text{pH} = -\log 10^{-14} = 14$.

Depending upon the pH of the water the NaOH is being dissolved into the pH can be either lower or higher than the above. As a very gross estimate, half the amount of NaOH, or 20 grams, will produce a pH close to 13.5 in water. When this pH adjusted or basified water is added to root bark the NaOH will react with the powder and lower the pH a bit. As a rough estimate, depending upon whether you are using granulated NaOH or crystals, pellets etc. three measured tablespoons should weigh close to 40 grams and should be base enough to basify 1 litre of water to close to a pH of 14 which will be lowered closer to 13 when mixing root bark powder into it. Since the ideal extraction pH of Mimosa hostilis root bark is closer to 13.5 this tech calls to have a higher ratio of NaOH to water which is approx. 1 tablespoon or 13-15 grams (depending upon whether a powder, crystals or pellets) of NaOH per 150ml of water which should raise the pH closer to 13.5 when mixed at a ratio of 1/4 root bark powder to 3/4 basified water.

While I have recommended the above ratio of water to root bark powder at 1/4 powder to 3/4 water other teks specify 10ml of water per gram of powdered root bark which is about 1.3 US gallons per 500 grams of root bark which is different than the amount I have recommended in this tech. Mix your root bark and basified water to the consistency you want, I do not believe anything in this process requires a high degree of exactness whether that be the amount of root bark powder to water, NaOH to water, amount of naphtha stirred in each time and so on. The fact is small to somewhat moderate departures from what I have outlined in this tech will not make a large amount of difference, especially at the high pH required to extract the root bark. For example; if you use plus or minus 20% NaOH the pH of the extraction will not be affected much, 20 percent more or less water either but if both the both the amount of water and NaOH are radically different such as far more water and far less NaOH, or far less water and far more NaOH, far less powder and far more base adjusted water etc., those departures from the outlined amounts would likely effect the required time and number of extractions performed to extract the majority of the alkaloid out of the mix but as long as the pH is still close to 13 or more the extraction will still probably provide a reasonable amount of yield. All of this becomes moot if you also perform a long term extraction (with extra stirring every day) after the short quick multiple extractions are first completed which will make up for the differences.

The only thing I believe which can probably be done wrong to significantly alter the amount of yield or cause the extraction to possibly fail is if you use far more powder and far less basified water than outlined causing the powder to become only a paste, regardless of having a high pH. Now that could cause a problem with your extraction, but to tell you the truth I have not tried to know and for all I know that might produce even better results and at far less work, give it a try if you feel so inclined. This tech is based on other peoples tried and true work, not my own knowledge about chemistry which is very little. Sure, I have put a couple of new ideas into practice with this tech which I do not think have been put into a public tech before but they have probably been used by someone somewhere sometime in the past with MHRB. Who knows for sure what works best until you try, some of the best things people have come up with were from the untrained and uneducated who did not know better than to try them, ignored by the current experts who thought they would not work. Experiment, find your own best ways of doing things, this tech is just one way of many which will work.

Regardless of the figures in the above paragraph to determine the amount of NaOH needed to bring the aqueous mix of root bark and water up to a pH of ~ 13.5 (which was based upon an earlier tech by Soma) this amount of NaOH might be more than is really required. An individual in the entheogen community has been working to with MHRB to determine the real world minimum amount of sodium hydroxide needed to efficiently extract powdered MHRB, believing that an efficient extraction can be achieved with as little as one fifth to one tenth the amount of NaOH to produce a pH close to ~ 13 which should be high enough for the extraction. If his tests prove this out then this tech will be later modified to specify a smaller amount of NaOH for extractions without the need to measure pH. While the higher pH of 13.5 ($\sim$ five times more NaOH than at 13.0) will work just fine as far as extracting the alkaloid and reduce the amount of potential emulsion formed by stirring, reducing the amount of base dissolved into the water will make the extraction a little safer to work with but still requiring goggles and rubber gloves.

The Most Common Causes of Extraction Failures

Too low of a pH is the most common reason for an extraction failure due to leaving most, if not all of the alkaloid behind if you do not achieve a high enough pH. Although an amount of the total alkaloid contained in the root bark can be extracted from a basified solution at a pH of 9 to 10 at that low of a pH relatively little of the DMT will be released as a freebase causing the extraction yield to be much smaller than normal including the added trouble caused by large amounts of emulsions which will form in the extraction solvent at that low of a pH causing great difficulty in separating the solvent from the aqueous portion of the mix.

Although I cannot disagree it is certainly best to have a pH meter available or pH papers which will give a clear indication of the upper end of the pH scale but most papers cannot show whether the pH is really at the ideal extraction pH. Because of this problem someone came up with a great method which does not require reading the pH and that is to add a measured amount of NaOH to a specific amount of MHRB, as determined by experience. The recommended minimum amount of NaOH as specified in Somas tek is 1 teaspoon per 50ml of water or roughly 3 tablespoons per 300ml of water no matter how much root bark is being extracted by only using as much water as is necessary to keep the aqueous mix a watery slurry. You do *NOT* want a thick mix anywhere from the consistency of hot caramel

to pancake batter which are far too thick to work out very well. It is best to have the mix a little on the thin side like chicken soup than using so little water that it produces a thick mix, once all of the root bark is stirred up into the basified water.

A great last measure which can be performed to be sure you have raised the pH high enough: After you have extracted everything you think you can out of your root bark double the amount of NaOH/lye mixed into the root bark and try extracting it again to see if more alkaloid comes out of the mix. This might seem like over kill and way too much lye but I have found that you can use as much as lye as two thirds the weight of the root bark being extracted. If extracting 500 grams of root bark 300 grams of lye/NaOH is not too much when dissolved into 3 liters of water and has worked out very well for me when I have increased the NaOH that much for the final couple of extractions netting an unexpected bonus of alkaloid.

Due to the recent difficulty of finding pure NaOH crystals on the store shelf in the form of a drain opener some individuals have reported other bases such as KOH or potassium hydroxide can be used in place of NaOH which may be true, I do not see why not but I do not know of anyone who has reported to have successfully used that kind of base. Red Devil Lye used to be the most common source for easy to find off the shelf NaOH in the past but due to its wide spread use to manufacture illicit drugs has been voluntarily removed from the market by the manufacturer. Although if hard pressed, NaOH can be made from simple table salt through electrolysis with plus and minus electrodes with water unless absolutely necessary to go to that kind of trouble it is obviously far easier to just purchase sodium hydroxide online through one of the auction web sites which is being sold for candle making, baking (food grade) and bio-diesel projects than to make your own.

Caution: When adding NaOH to water to make a basified solution the chemical reaction will produce near boiling hot water which can boil over or spurt out of the container. As a safety margin do not combine extremely hot basified water to the root bark powder or vice versa if the temperature is over 120 °F. which if only 20 °F hotter can possibly cause vaporization of the freebase alkaloid released into the solution to evaporate out of the mix and into the air reducing the total potential yield.

Choice of Solvent

Many solvents can be used to extract DMT from plant materials, dichloromethane (Methylene Chloride, DCM) is good one but difficult to acquire at high purity without other solvents mixed into it without special ordering from a chemical supply house. If you do use DCM this solvent is heavier than water and instead of floating on top of the aqueous mix will go to the bottom and may cause a problem due to the basified water being pushed out of the root bark and difficult to separate from this solvent later. Naphtha seems to be the most common solvent for extracting DMT from plant materials in use right now which can be obtained from several sources.

What kind of naphtha is the best? I do not have an answer for this one but I can tell you what some individuals are using. VM&P naphtha is one source people have been using which is usually fairly clean, others use *Ronsonol* lighter fluid which is also naphtha. There is another solvent which can be used instead of naphtha and that is hexane which has been reported to be superior to naphtha for extracting DMT, although most naphtha contains an amount of hexanes too. Hexane can be purchased from art supply stores under the brand name of *Bestine* which is used as a rubber cement thinner. No matter what solvent you use