Brewing Your First Mead

Planning and Acquisition

It took me almost 100 batches of homebrew before I finally decided to do a mead. Guys in the ASH Club had been telling me how easy it was to brew a mead and I had tasted a few recently that I really liked. So, I decided to brew one myself and see just how easy it was. Well, it was obscenely easy compared to a batch of beer. One thing that I had always been concerned about was all the adjustments that you had to make during the fermentation. You can add add acid blend or adjust the PH of your Mead but I don't call for any extra ingredients in this recipe.

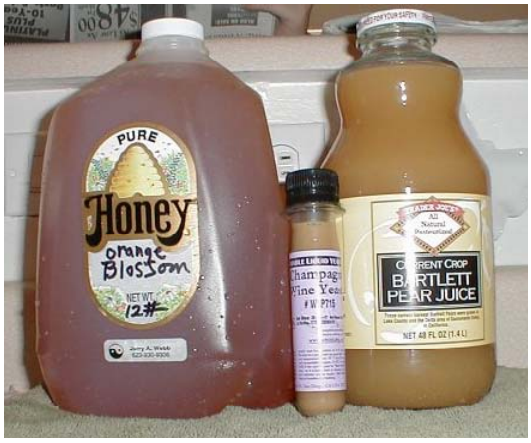
Before you get started on your mead though, you need to do some planning and gather the necessary ingredients and gadgets needed to brew a mead. This is what I used.

Brew Pot (5 gallon)
Stirring Spoon
Floating Dairy Thermometer
Hydrometer and test tube
Plastic Funnel
6-6.5 gallon Fermentors(plastic or glass)
Rubber stopper(s) for fermentors
-Or- a Keg in place of the bottles

Fermentation Lock
Siphon/transfer device
Bottle Filler
Bottles(12 or 22 oz)
Cleaning brushes for bottles and equipment
Bottle Capper
Cleanser and Sanitizer

For the ingredients, we are going to start with a recipe for a Melomel. A Melomel is Honey and Fruit feremented together. For the mead that I am writing this howto about, I decided to brew a pear mead. I tasted a pear mead at the BASH Campout/Spring 2001 and it was delicious! If you want to brew a straight mead, just leave out the pear juice. So lets go through the list of ingredients for my batch of Unprickly Pear Mead.

1 gallon Orange Blossom Honey
72 fl oz of pure pear juice
White Labs Champagne Wine Yeast
3-4 gallons of the best water you can find



That's it! Some honey, some water, and some yeast. Throw some fruit or other flavoring in if you want but as you can see, the ingredients for a mead are very basic. In addition to the ingredients, you are also going to need a way to cool the mead down after the boil so you will probably need some bags of ice too.

Brew Prep

Brewing a mead takes a fraction of the time that brewing a beer does. I place the gallon of honey in a sink full of hot water in order to get it as runny as possible. This makes pouring a little easier. You will also want to take your yeast out of the fridge and let it warm up to room temperature. This takes about 2-3 hours so make sure you give your

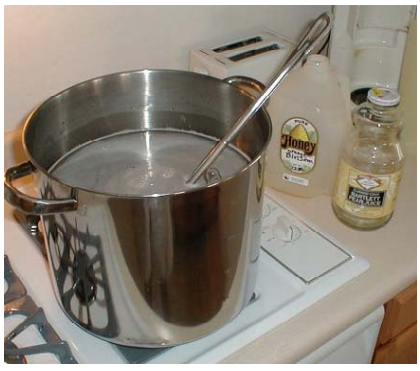
yeast ample time to warm up. Speaking of the sink, now is usually a good time to clean it up as you may be soaking some of your utensils in cleanser and/or sanitizer.

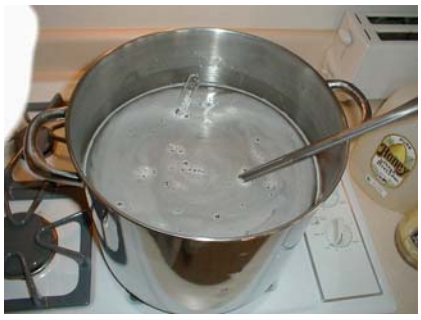
Now, a word about cleansing and sanitizing. Cleansing is actually using an agent that will break up the grime or other organic material that you may have on your brewing equipment. Sanitizing is merely killing the germs on these items so if you have some utensils that are dirty, don't expect them to become clean by merely using sanitizer. A good rule of thumb for your brewing equipment is too rinse it off immediately after use so none of the sticky gunk gets a chance to dry and harden. If you get into the habit of washing your brewing equipment while it is still wet, cleansing and sanitizing will be a much easier task.

For the water, you want to use the best possible water for your mead. When I brewed extract beers, I always used spring water purchased at a grocery store and never really seemed to have a problem with it. Since you may not be boiling all of the water used in your mead, you want your water to come from as pristine a source as possible. You will also need to make sure you don't use distilled water as it does not have the mineral content needed to make mead. The minerals in spring water are needed in mead so we need to make sure we use water that contains minerals. If you have any questions about your water, it is not a bad idea to give it a quick boil in order to kill off anything unsanitary that might be lurking in it. At the end of the boiling process, you will be adding your cooled down must to about 2-3 gallons of water and this is the water that you need to be concerned with since the water that you will be using in the brewpot will be pasteurized. When in doubt, boil to sanitize. I have never had a problem with water purchased at the store and I usually did not boil it.

Before you get started with the actual mead brewing process, lets take a quick minute and go over the basic process of brewing a mead. We have our basic brewing ingredients, which consist of honey, some pear juice, yeast, and water. You are going to heat up the water and add the honey, scraping the insides of the container to get as much out as posible. Then we are going to "pasteurize" the contents of our brewpot, but not boil. We are going to filter the scum off the top of the concoction after it heats up, pasteurize for about 15 minutes, and then cool down the mead to a temperature where we can pitch the yeast. Before you add the chilled mead to your fermentor though, you should have 2-3 gallons of room temperature water in your fermentor depending on how much volume you had in the brewpot. For my meads, I like the volume in my fermentor to be about 5.5 gallons after everything has been added. So, are you ready to brew that mead?

Lets brew some mead!





OK, lets put that brewpot on the stove, or propane burner, add about 2-3 gallons of water, and turn on the burner. You want to make sure that you leave some space in your brewpot for the honey and anything else that you might add. Since you are not going to be boiling your mead, you can bring the total volume of liquid up a little more than you would a concoction that you would boil.

When your mead starts to heat up, you will notice a white layer of foam or scum that rises to the surface. My understanding is that this scum contains impurities and other stuff that you don't want in the finished product so what I did is stir the mead until you get a whirlpool. This will collect the scum at the center of the brewpot where it is easy to scoop off with the spoon. I usually do this about 3-4 times over the 15 minutes that I am pastuerizing the mead. Now, about pastuerization. Why do you need to pasteurize the honey and other ingredients? You need to do this in order to kill off any bacteria or other unwanted vermin that might be lurking within your ingredients. Raising the teperature up over 185 and holding it for about 15-20 minutes will accomplish this. I like to heat my brewpot ingredients up to about 190-195 for 20 minutes for my pastuerizations. Once this step is complete, you are ready to chill down your mead to room temperature.

There are many ways to cool down your must, or unfermented mead, but the easiest is probably to put it into your sink with an ice bath around the outside. NEVER add ice cubes to your must to cool it down. The time between the end of your boil/pastuerization and when you are going to pitch your yeast is fairly critical and you need to make sure that anything that comes in contact with your must at this point is completely sanitized. You should also have your floating dairy thermometer in your must at this time so you can monitor the cool down. Cool the must down to room temp, about 70-75 degrees. Your yeast should also be the same temperature by now. You want the combined must/water combination in your fermentor to be the same temp as the yeast. If the must temp is too hot or too cold, you could potentially do damage to the yeast when you introduce it to the must so that is why you need it to be about the same temperature.

After the must has cooled to room temp, you need to add it to the fermentor. I use glass fermentors because I like to see what is going on with my beers/musts without having to open up the fermentor. If you use a plastic fermentor, you pretty much have to open up the lid if you want to inspect your fermentation. Whatever type of fermentor that you use, it is now time to add about 2-3 gallons of fresh, room temp water to the fermentor and then our chilled must. NOTE: This fermentor must be 100% sanitized, as must the funnel, thermometer, strainer, etc.. Add the water first and then put on the lid if you are using the plastic version. Place your funnel into the top of the fermentor. If you have some chunks or chunks of debris in your must that you don't want to go into the fermentor, place a strainer in the funnel. Slowly pour the contents of the brewpot into the fermentor. You should end up with about 5 - 5.5 gallons of must after this whole process. At this point, you should take a hydrometer reading of your pre-fermented must. This will give a point of reference so that we can measure and monitor the fermentation process. Dip the sanitized test tube down into your must and fill it up about 75% of the way. Now place your hydrometer into the tube, let it settle, and take the reading. Record the number of where the must meets the hydrometer. It could be anywhere from 1.070 to well up over 1.100 depending on how much sugar is in the must.

Now it is time to pitch the yeast. Oh yeah, did you remember to rinse out your brewpot and the other utensils before they dried? Now is a good time to do that if you have not done so already. Before you throw the yeast into the must, you want to aereate the must. The must has already been areated to some extent when you poured it into the fermentor but it is a good idea to slosh it around or stir it up with a sanitized spoon in order to get as much oxygen in the must as possible. The yeast need oxygen in order to get going so this is why you need to perform this step. This is the last time that you will want to introduce oxygen into your must/mead though. Once you are done with the aereation process, you can add the yeast to the fermentor and stir it in. Put the fermentation lock on the top and put it in a cool, dark corner somewhere. About the fermentation lock though. First you will place the stopper in the hole of the plastic lid or the top of the glass fermentor. For the fermentation lock, you want to have some sanitized water inside of it. I always add some water/idophor solution in my fermentation lock which is what I usually use to sanitize everything with also. After I have sealed the fermentor with the stopper, I place the fermentation lock into the stopper. This pretty much concludes the boil part of the processs and now you are ready for the fun part, cleanup!

Fermentation

For fermentation you will need 2 vessels, 1 for primary fermentation and 1 for secondary fermentation. Primary fermentation is where most of the fermentation process takes place and for a mead, this phase can last anywhere from a few weeks to months. This is one area where mead really differs from beer. The brewing process is much shorter, but the fermentation process is much longer. For the Champagne Yeast that I use for the dry meads, the total fermentation process takes about 4 weeks, maybe a little longer. Once you have the cooled must and yeast all mixed up in your fermentor, it is time to let the yeast start

doing their work. Anywhere from 6-48 hours after you pitch the yeast in the must, you will start to notice pressurization in the fermenation lock and then outright bubbling. A foam may or may not appear on top of the must. A lot of what happens during your fermentation will depend on the yeast strain that you use.

When the bubbling starts to slow down or stop outright, it is time to transfer the mead, yes, it is mead now, into the secondary. Try and leave as much of the sediment behind as possible. You might still have some yeast that is suspended in the mead and it might start to ferment again once it has been stirred up and racked into the secondary. "Racking" means transferring the mead from one vessel to another. You cap off the secondary the same way that you did the primary, with a sanitized stopper and fermentation lock. Make sure that the secondary vessel has been cleaned and sanitized before racking. One other thing that needs to be mentioned about racking is that you want to try and transfer the mead with as little splashing as possible so that oxygen is not introduced into the mead. The mead will be oxidized if it is introduced to too much oxygen after fermenation so try and minimize this as much as possible. Now it is time to let your mead age. Mead aging can last anywhere from a few weeks to years. I just throw a black trash bag over my aging mead to keep out the light and let it sit until I feel like tasting it. When that time comes, it is time to either bottle or rack into a keg.

So that is pretty much it on how to make a mead. The pear mead that I used for this example is still aging in a fermentor, but it will be in a keg soon!