How to make a Fruit Mead (A Melomel)
This is a short and informative guide to successfully making a fruit mead. Fruit mead is mead that has some kind of fruit added. The technical names for this are Melomel or a Mulsum.

It is in this addition of fruit that Mead really becomes spectacular. And it is in this that I believe mead far outstrips the capabilities of regular grape wines. Yes, there are many variations of grape wines but in no other brewing or fermenting method is there the stunning variety of wines you can make unless you are talking about mead.

There is simply something about honey wine that lends itself to absorbing and retaining the flavors of fruits. If you have a favorite type of fruit chances are that it will make a spectacular mead. For me it is cherry and pear.

So, roll up your sleeves and let’s learn how to make some Fruit mead.

About Will

I have been making mead for many years now and have made many successful batches in all kinds of flavors and sizes and I have made quite a few mistakes. I will help you to avoid some of the common pitfalls and I will cover the questions that arise when it comes to the craft of mead making.

Aside from being a mead maker I am also a webmaster and I have had a website about mead for a few years now (http://www.stormthecastle.com/mead/index.htm)

This website has received hundreds of thousands of visitors over the years and because of this I have received many hundreds of emails from people wanting to make mead. And people invariably have asked me many questions. And over the years I have seen the same questions over and over so I have a good sense of the questions you will have as a new mead maker and hopefully this booklet will answer those questions.

I also have a series of youtube videos all about mead making. This is a nice resource for you to learn more and actually see me make mead: http://www.youtube.com/view_play_list?p=9E2B31D6B53DA1B1

For ease of use I have included all the information you need in this booklet but I have also added an “FAQ” section at the end of this booklet. You might want to look this section over. It answers most of the common questions that a beginner has about mead making.

So, Good luck in your new venture as a mead maker and be sure to check out my website for more mead stuff.

My Philosophy and Approach in this booklet

There are a lot of different ways to make mead and every book, and every mead maker, has variations on how to do it. What I give you here is two ways to make it. And I will explain in depth each way. This is because I find that there are generally two types of brewers. The first type is the person that is curious about mead and would like to make some because it would be an interesting and enriching experience.
This kind of person might make a batch or two for the enjoyment of the process or the enjoyment of some homemade mead. This person might make a batch or two each year to give to friends or share during the holidays.

The second type of person is seriously considering home brewing as a hobby. They are fascinated by the whole process, tend to have several batches going at the same time, and invest time and money in the art as a hobby.

No matter which type of person you are this booklet is perfect for you because I have laid out two different methods in this book which I call the Beginners Way and the Intermediate Way.

The Beginners Way

In the first process I show you how to make a fruit mead quickly, easily and with very few chemicals. This is so you can get started right away. And so you can keep your budget down. If you don’t have any equipment or don’t want to spend a lot of money then this is the way you want to go. If you would just like to make a batch of fruit mead and see what you think this is the perfect way for you to go.

The Intermediate Way

The second process is a little bit more in depth and I use several different chemicals in the making of the mead. This will cost you a little bit more money but you will make clearer mead, run less risk of having a bad batch, and have a mead that will taste better and have a much longer shelf life.

I recommend that if you have never made mead before you start out with the easy method and make your first batch then you move on to the second process. But the choice is yours. The intermediate way will cost you about an extra twenty to twenty five dollars to make a one gallon batch. This extra cost isn’t for every batch you make. It is just so you can buy a basic supply of chemicals and equipment which can be used over and over again.

The Most Important things to think about and remember

Patience – This is actually a difficult thing in today’s world. We have become accustomed to everything happening right away and mead just doesn’t follow this rule. It takes its own time and our job as brewers is ninety percent patience and observation. Try not to rush your mead along and try not to make any immediate changes. Almost nothing has to be done right away. This rush to action can hit you particularly if you think something is wrong with your mead. And your first reaction might be to do something about it. But, it will be quite alright to take some time, email somebody, research your issue and take some time to find out what is wrong, if anything.

Sanitation – I really want to stress the importance of sanitation when it comes to mead making. About 90% of what you are doing when you make mead is trying to set up a nutrient rich environment that yeast will happily grow in. And this can lead to problems, particularly the chance for unwanted and opportunistic yeast and bacteria to grow in your mead. You very much minimize this by properly sanitizing everything that comes in contact with the mead. And sanitizing isn’t washing, it is using
Background, Basics and Overview

What Is a fruit Mead?

This has a very simple answer. Mead is a fermented beverage with alcohol content. It is fermented by primarily three ingredients: Water, Honey, and Yeast.

But the real beauty of mead is in the versatility of it. Mead can very much be a blank palette where you can add all kinds of wonderful flavorings to it. Peaches, pears, blueberries, raspberries, watermelon, ginger, and on and on. Just about any fruit or spice can be used as a base flavor for mead.

And this is what this booklet is all about – making a mead with the beautiful flavors of fruit added.

Batch Size

I recommend you start out with a one gallon batch. This keeps your cost down and is much easier to make. Typically, mead makers and wine makers will start out with a 5 or 6 gallon batch but just to get started with that size can be a considerable investment in money. So, to be conservative, and dip our toes into the mead making hobby we will just make a simple 1 gallon batch. Note that if you want to make a 5 gallon batch all the instructions are scalable. You simply use five times the water, honey and fruit. There are some small differences in how much of the chemicals you use. I give you rules of thumb in the FAQ for this.

An Overview of what you will do

The process is quite simple. You will mix honey, water and fruit together in a container then you will add yeast to it. This mixture will start to ferment and in this fermenting it will give off carbon dioxide as a byproduct of the yeast growing so one of the biggest challenges you have is to allow this gas to escape while not allowing any outside bacteria, yeast, or impurities to enter. This is accomplished with an airlock.

Within 24 hours your mixture will start to ferment vigorously and this will last approximately two weeks. This is the initial ferment period. Once this initial vigorous ferment has ended you will transfer the liquid to a new container (A glass jug) leaving the fruit and sediment behind. Now you enter the longer term secondary ferment period. The mead should stay in this secondary ferment for at least three months. And, optionally you will siphon it into a new jug every month. After a minimum of three months the secondary ferment is completed and there will be no more activity in the airlock. Then you siphon it into bottles for its aging period. This should last at least another six months before it is ready for drinking.

So, depending on a few different factors the whole process will take between nine months and one year from initial mix to drinking. And typically the longer you let the bottled mead age the better it will get.
Let’s Make Some Mead

The Beginner’s Way

This is the faster, easier, and less expensive way to make a fruit mead. If you want to go to the Intermediate way it begins on page: 10

Equipment and Supplies you will need

The picture to the right shows most of the materials:

- A Pan that holds at least 1 gallon, along with a spoon or ladle
- A funnel (optional but will help)
- 1 One gallon glass Jug
- 3 pounds of honey (I recommend you get a Clover honey) More about honey at the end of this booklet in the FAQ section
- 1 packet of yeast (I recommend a champagne yeast) Lalvin EC-1118 works very well
- 1 Solid Rubber Stopper #5.5 or #6
- 1 Drilled Rubber stopper #5.5 or #6
- 1 Airlock
- Some kind of sanitizing agent like Easy Clean (You can use unscented bleach to sanitize. More in the FAQ)
- Additionally not shown in picture:
  - 1 pound of your fruit of choice
  - 1 gallon of water
  - 1 cup of orange juice
  - A small bowl for mixing the yeast

In Two weeks you will siphon all of the materials out of this primary ferment. At that time you will need these additional materials:

- A second One Gallon Glass jug to siphon into
- 1 siphon hose about 3 feet in length

Note: If you need some of these materials like airlocks, yeast or jugs I have a page with quick links so you can buy them on amazon.com here:

Let’s Make the Beginners Fruit Mead!

**Step One: Sanitize your Equipment**

Once you have gathered together all your materials you should sanitize everything that will come in contact with the mead. The Jugs, spoon, funnel, siphon hose, rubber stoppers and anything else. Except for the pan you are heating the honey and water in. No need to sanitize that; heating up the honey/water will take care of that. I generally do this by filling my kitchen sink half full of water and adding the sanitizing agent.

Sanitizing is the process of cleaning all the equipment with some kind of chemical that will kill any bacteria or other types of living things. When you mix up honey and water you are creating a rich culture for the yeast to grow in. Other unwanted things could grow in it too! So, you sanitize everything to minimize this possibility.

The easiest way to do this is to fill your sink half with water and add the sanitizing agent to the water. Then soak all the various pieces of equipment you need sanitized.

I use a product called Easy Clean. This sanitizes and you don’t have to rinse. You can use unscented bleach as your sanitizer. More about this in the FAQ section of this booklet.

**Step Two: Make the Fruit Must (“Must” is what mead is called before you have added yeast)**

Slice your fruit of choice into small pieces. They have to be small enough to fit into the mouth of the glass jug. Remove and discard any pits or seeds if practical. I have sliced cherries.
Put one half gallon of water in a pan, add your three pounds of honey and heat it. Don’t bring it to a boil, just heat it nicely for about ten to fifteen minutes. Optimal temperature for this is about 160 degrees Fahrenheit. Stir it regularly and skim off any foam that forms. Turn the heat off and add your fruit, stirring gently. Now let it cool.

This purifies the honey and water, mixes it well and draws out the flavor of the fruit.

Step Three: Prepare your Yeast

While the Must is cooling let’s prepare our yeast. Typically you want to do something called “Starting” the yeast. This gets it warmed up and started before you add it to your must and it gives you a much better chance at success.

Typically you start your yeast by gently stirring it into a half cup of warm water. But your yeast might come with specific instructions right on the package. Follow these instructions. They will tell you what temperature to heat the water to and how long to let the yeast sit in the starter. If there are no instructions you can use warm water about 100 degrees F and let the yeast sit in it for about 15 minutes.

Step Four:

Using a funnel pour the must into your Jug. You may have trouble with the fruit. Do whatever you need to get the fruit into the jug!

NOTE: Also add one cup of Orange Juice at this time. Orange juice balances the PH and works as additional nutrient for the yeast. More on this in the FAQ. If you are making some kind of a citrus mead like orange or lemon then don’t add this orange juice. It is not necessary.
Step Five: Mix it up

Put the solid stopper on the jug, pick it up and gently shake and swirl it for a good five minutes. You want to make sure the honey and water are well mixed together.

Step 6: Let’s Pitch the Yeast

The yeast starter should have been going for a good 15 minutes now. If not then let it sit until 15 minutes or more have passed. Examine it. It should be forming a little bit of foam and bubbles. Nothing dramatic but it should be evident that something is going on in that water. If nothing is happening let it sit another fifteen minutes.

Stir the yeast mixture gently then pour it right into your jug of must. Then stir or shake the must gently. Not imperative to do. Just stir or shake it gently.

This process of adding the yeast to the must is called “Pitching”.

Step 7: Finish up

Add more water to the jug so it about as full as you see in the picture at left. It is important to leave some space like this because of the bubbling and foaming of the mead that will occur.

Fill the airlock half way with water, insert it into the drilled rubber stopper then install it onto your jug.

Now cover the glass part of the jug with a cloth or towel and place it in a cool dark place. The temperature should be somewhere around 65F to 70F although this can vary. But if it gets too cool or too warm the ferment can stall.

What Happens Next?

Within less than 24 hours that airlock will start bubbling! Nice! Everything is going well. Just monitor it for the next couple of weeks. (If it doesn’t start bubbling refer to the troubleshooting section at the end of this booklet)
I have a video if you want to see several batches of bubbling mead:
http://www.youtube.com/watch?v=k7mJlzu2IDE

Step 8 (About two weeks later)

You will now need your siphon hose and second jug.

At about the two week point the bubbling in the airlock will have probably slowed down quite a bit (Less than 1 bubble every thirty seconds). If it is this slow you are ready to rack the mead into a new jug. If it is still bubbling at a rate of more than 1 bubble every thirty seconds then it is not ready for racking. Just monitor it every day until it reaches this rate.

Racking – (The technical name for siphoning the liquid into a new container)

Sanitize your new glass gallon Jug and your siphon hose.

Gently siphon all the liquid from the old jug into the new jug and move the airlock over to the new jug. That’s about it. Pretty easy! You need to move the airlock over because the ferment is still going on and the process of racking will stir it up and invigorate it for a short period of time. Don’t be surprised if it gets a vigorous bubbling for a day or two after racking.

At the bottom of your old jug there will be a thick layer of sediment. Leave all this behind. Try not to siphon any of this over to the new jug. And leave all the fruit behind. You just want to transfer the liquid. Get as much as you can.

Finishing Up Several months later

You can be flexible with these guidelines but I recommend every month you rack again into a new sanitized jug, leaving all the sediment behind. If you rack every month like this it will clear up very nicely. Continue to rack every month until you are ready to bottle it.

Bottling: As a minimum you should wait four months before bottling. A one gallon batch will yield between three and four typical wine bottles worth.

I don’t cover bottling in this booklet but I do have a youtube video that will show you how to do it and what equipment you need: http://www.youtube.com/watch?v=bh_8Dc33Ptw

Drinking: It will be a minimum of nine months since you mixed the mead until it is nice for drinking. Ideally you should wait a year. The longer you wait the better but typically it will peak somewhere between a year and two years. After that it may decline in taste.
**The Intermediate Way**

This way of making mead is a little more complex than the easy way. And it is a little more expensive. But this way of mead making makes better mead, usually with a bit of a better taste, and it is more stable. It will last much longer on the wine rack and there is a much reduced risk of the batch going bad because we take further steps in sanitizing and protecting against contamination. Generally you will get clearer mead (crystal clear) and it will taste more of the fruit that you use because we add a chemical that will draw out the flavor.

There are quite a few benefits to doing it this way. If you think that mead making is something you are going to do regularly then this is the way you should go! But it does cost more and is a bit more work. If you want to start out with the easier way you can find it beginning on page 6.

**Overview of the Process:**

1. Heat up your honey and water, remove from heat and add your fruit
2. Put this mixture in your plastic pail or glass jug and add some chemicals
3. Let it sit for a day and then pitch your yeast
4. In approximately two weeks you rack into a new container (secondary ferment)
5. In approximately four months you can bottle

**Equipment and Supplies you will need (In the FAQ section of this booklet I have pictures and more information about many of these items)**

The picture to the right shows most of the materials:

- A Pan that holds at least 1 gallon, along with a spoon or ladle
- A funnel (optional but will help)
- 1 One gallon glass Jug or a 2 gallon fermentation pail
- 3 pounds of honey (I recommend you get a Clover honey) More about honey at the end of this booklet in the FAQ section
- 1 packet of yeast (I recommend a champagne yeast) Lalvin EC-1118 works very well
- 1 Solid Rubber Stopper #5.5 or #6
- 1 Drilled Rubber stopper #5.5 or #6
- 1 Airlock
- Some kind of sanitizing agent like Easy Clean (You can use unscented bleach to sanitize. More in the FAQ)
- **Additionally not shown in picture:**
  - 1 pound of your fruit of choice
• 1 gallon of water
• 1 cup of orange juice
• A small bowl for mixing the yeast

In Two weeks you will siphon all of the materials out of this primary ferment. At that time you will need these additional materials:

• A One Gallon Glass jug to siphon into
• 1 siphon hose about 3 feet in length

Note: If you need some of these materials like airlocks, yeast or jugs I have a page with quick links so you can buy them on amazon.com here:

About the Two gallon Fermentation Pail – This is optional but recommended. It makes it much easier to handle the mixing of honey, water and fruit. I show you in this tutorial how to mix the honey, water and fruit then add it directly into the glass jug. But if you have a two gallon fermentation pail this is much easier. Simply put the must into this pail and put the airlock on it. It makes it easier to clean and there are no worries about squeezing the fruit into the jug. A pail like this is very inexpensive.

You will also need these chemicals to make mead this intermediate way.
From Left to Right:

1. Campden Tablets: (2 ounce bottle) This is a chemical that will kill wild bacteria and wild yeast in your mead. It insure only your yeast will grow.
2. Pectic Enzyme – (1 ounce) This breaks down the pectin in fruit to bring out the flavors and it will make your mead much clearer. The pectin inside fruits can cause something called pectin haze.
3. Yeast nutrient – (2 ounce) This can be important for the growth of your mead. It will help insure a vigorous ferment. Yeast needs a lot of nitrogen to grow and honey is poor in nitrogen. Adding fruit does help some but it is best to also add a nutrient.
4. Wine tannin - (1 ounce) This is often optional but it adds a certain amount of astringency and pucker to the wine. This is often more common in wines made without fruit.
5. Acid Blend – (2 ounce) Yeast grows within a certain pH range and honey is close to out of this range. By adding acid blend you will create a better environment for your yeast to grow and you will make a better tasting mead.
6. The recommended ounces of these chemicals will make you plenty of batches. They are simply my recommended beginner sizes and the total batch cost for all five of these cost me ten dollars plus shipping. You should be able to find them at similar prices in these sizes.

Let’s Make the Intermediate Fruit Mead

Step One: Sanitize your Equipment

Once you have gathered together all your materials you should sanitize everything that will come in contact with the mead. The Jugs, spoon, funnel, siphon hose, rubber stoppers and anything else. Except for the pan you are heating the honey and water in. No need to sanitize that; heating up the honey/water will take care of that. I generally do this by filling my kitchen sink half full of water and adding the sanitizing agent.

Sanitizing is the process of cleaning all the equipment with some kind of chemical that will kill any bacteria or other types of living things. When you mix up honey and water you are creating a rich culture for the yeast to grow in. Other unwanted things could grow in it too! So, you sanitize everything to minimize this possibility.

The easiest way to do this is to fill your sink half with water and add the sanitizing agent to the water. Then soak all the various pieces of equipment you need sanitized.
I use a product called Easy Clean. This sanitizes and you don’t have to rinse. You can use unscented bleach as your sanitizer. More about this in the FAQ section of this booklet.

**Step Two: Make the Fruit Must** (”Must” is what mead is called before you have added yeast)

Slice your fruit of choice into small pieces. If you are not using a fermentation pail they have to be small enough to fit into the mouth of the glass jug. Remove and discard any pits or seeds if practical. I have sliced Bartlett Pears.

Put one half gallon of water in a pan, add your three pounds of honey and heat it. Don’t bring it to a boil, just heat it nicely for about ten to fifteen minutes. Optimal temperature for this is about 160 degrees Fahrenheit. Stir it regularly and skim off any foam that forms. Turn the heat off and add your fruit, stirring gently. Now let it cool. Stir it very well, you want the honey and water to become homogenous.

This purifies the honey and water, mixes it well and draws out the flavor of the fruit.

Let that must mixture of honey, water, and fruit cool to room temperature and then get it all into your jug or your two gallon fermentation pail.

Add one cup of orange juice. But if you are making a citrus based mead like an orange mead, lemon mead or grapefruit mead then no need to add the orange juice.

Add more water to fill it to about the level shown in the picture.

If you are making this batch in a two gallon fermentation pail do not add any more water. It is difficult for you to know how much is right. When you transfer from the pail to your one gallon jug in a couple of weeks then you can top off with water.
**Step Three: Lets Add our chemicals**

- Add ½ teaspoon of Pectic Enzyme into the jug. This will break down the fruit to release the flavor and it will prevent the fruit from making the mead cloudy. This cloudiness is called pectin haze.
- Add ½ teaspoon of acid blend. This will balance out the astringency of the mead and bring it into a better pH range for the yeast to grow. If you are making a citrus based mead like orange, lemon or grapefruit do not add acid blend.
- Add 1 teaspoon of yeast nutrient this will supplement the food source for the yeast and keep it growing strongly.
- Add ½ teaspoon of wine tannin.
- Crush up 1 Campden Tablet and add it. This is the most important thing here. This will kill any unwanted yeast or bacteria in the fruit you have added.

Now put the stopper on this batch and shake it up mildly so all the chemicals are mixed well into the liquid. If you are using a fermentation pail you can go right ahead and stir it well.

**Step Four: (Important) Do not add the yeast at this time!** This is unlike the Easy way to make a fruit mead. You have added a Campden tablet to this batch and that is a chemical that will kill your yeast! What you have to do is keep the cork on the bottle or put an airlock with water on the fermentation pail and set it aside for 24 hours. Allow the Campden tablet to do its work.

**Step Five: (the following day – at least 24 hours later) Pitching the Yeast**

Stir up or shake up your batch of Fruit must.

Your yeast should come with directions on how to start it. Starting is the process of warming up the yeast in an easy way so it isn’t shocked when added to your must. This is rehydration of the yeast. If there are no instructions then do this:

Stir the one packet of yeast into ½ cup of warm water. Temperature should be around body temp. Let it sit for at least 15 minutes. It will start to become active and bubble a little bit with some froth. After the minimum 15 minutes stir it then pour the whole batch into your jug or pail of Must.
Now, insert your airlock into your drilled rubber stopper, fill the airlock about half way with water and place the airlock/stopper assembly onto your jug of mead or fermentation pail.

Put this in a dark place or cover the jug with a cloth and monitor it for the next couple of weeks.

What Happens Next: Within 24 hours (often within a few hours) the airlock will start bubbling and in a couple of days it will bubble vigorously (more than 1 bubble a second). This will continue for approximately 2 weeks. At around the two week period the airlock will have slowed down to less than 1 bubble every thirty seconds. When this occurs it will be time to rack it into a new container.

**Don’t forget to do this:**

I recommend you put some kind of label on the jug, and on the label write down any relevant information. You absolutely should write the day you first made this batch. You also might want to note the type of yeast you used and the type of honey. And note what kind of fruit you added.

**Step Six: First Racking**

When the airlock slows down to less than 1 bubble every thirty seconds the primary ferment is done and it is time to rack it (siphon it) into a new container.

NOTE: If it slowed down in less than the two week period you should wait the full two weeks. If it takes longer to slow down it is quite ok; wait until it slows to less than 1 bubble every thirty seconds before you rack it.

What to do: Sanitize your glass jug and your siphon hose and then gently siphon all the liquid out of the old container and into your new jug. Leave all the fruit and the sediment behind. Try to get as much liquid as you can but avoid the sediment!

**Step Seven: More rackings and Finishing Up Several months later**

You can be flexible with these guidelines but I recommend every month you rack again into a new jug, leaving all the sediment behind. If you rack every month like this it will clear up very nicely.
**Bottling:** As a minimum you should wait four months before bottling. A one gallon batch will yield between three and four typical wine bottles worth.

I don’t cover bottling in this booklet but I do have a youtube video that will show you how to do it and what equipment you need: http://www.youtube.com/watch?v=bh_8Dc33Ptw

**Drinking:** It will be a minimum of nine months since you mixed the mead until it is nice for drinking. Ideally you should wait a year. The longer you wait the better but typically it will peak somewhere between a year and two years. After that it may decline in taste.

**Checking the Mead:**

When you are doing this first transfer you should give the mead a good smell. Does it smell yeasty, slightly alcohol, fruity or ferment like? Then everything is ok. If something has gone wrong with the batch it will smell rancid. This means an unwanted strain of yeast or bacteria managed to take hold – if this is the case then you should dispose of the batch and do not taste any. If it smells ok you can give it a small taste. Just to monitor it and get a sense for what it will eventually taste like.

**Some Final thoughts about the whole process of mead making**

The yeast pretty much does all the work for you but there are two big rules when it comes to mead making. The first rule is to keep everything sanitized. Do not skip this! This is a food stuff and you will be drinking it so you don’t want it to be contaminated by anything. The second rule is not to panic! Mead needs time and it takes its time. You can also take your time. Often it is best to wait another day and monitor for a little while before taking some kind of action. If your batch isn’t bubbling in two days it will be fine to wait another day or two. And if you are anxious to drink and bottle but are not sure it will be perfectly fine to wait another week and see how it is doing; Or to wait another month before drinking it.

**Troubleshooting and FAQ**

**Troubleshooting and common questions**

*I added my yeast 24 hours ago and there is no bubbling. What should I do?* You should wait another 24 hours before doing anything but something to check is the temperature of the room you are storing it in. If the temp is too cold or too warm this can prohibit growth of the yeast. Temp should be around 65 to 70 degrees F. If you are out of this range move the mead into a room with this temp and wait another day to see if the ferment starts up. Otherwise after you have waited your second day you should consider pitching a half package of yeast to see if it starts. Be sure to check the expiration date on the yeast and follow the instructions that come with it.
How long should you keep the fruit in the jug? This answer varies and the longer it stays in the jug the stronger the effect on the mead but. Long periods of time in the jug can cause the fruit to decompose and have a negative effect on the mead. Typically two to four weeks is good for a beginner.

My mead is cloudy. Is that Ok? And how do I clear it up? Cloudy mead is normal during the fermentation cycle. But as the mead ages it should get crystal clear. If you regularly disturb the jug it will cause undue cloudiness. The best thing to do is give it time and rack it every 30 days. It will clear up as things settle to the bottom. If after a minimum of 3 months you still want to clear your mead up some more you can use a chemical product called Bentonite. This will clear it up dramatically. Be sure to use Bentonite for wine making and follow the directions. There are other types of bentonite.

What is racking? This is just the technical name for siphoning the liquid (mead or must) into a new jug.

What is a carboy? This is the technical name for the glass jug that you ferment your mead in.

Why Do I have to use an airlock? This is very important because while the yeast is fermenting it gives off a lot of gas and this gas will build up a tremendous amount of pressure. This pressure would pop the cork right off your jug, or worse it could literally explode the bottle or jug.

Can I do something to help protect the fruit in the jug? Yes, you can pre-treat the fruit with a chemical called “pectic enzyme”. This breaks down the fruit so it will add more flavor and it helps prevent decomposition.

What types of fruit can I use? Well, you can use just about any spice or fruit you can think of. Each one is different in how it interacts with the mead so I recommend that if you have a specific fruit you want to use you peruse the internet for recipes that are tried and true. If you are experimenting with fruit I recommend you use about a cup of fruit per gallon just to get you started in your first batch or two.

How can I adjust the alcohol content? This is definitely not something for beginners. Typically the yeast is what predominantly affects the alcohol level of the final mead. Each type of yeast will have a specific alcohol tolerance when that alcohol level is reached the yeast dies off and the batch stabilizes.

There is a thick layer of junk forming on the bottom of the jug. Is this ok? Yes and no. It is perfectly ok that it happened- and it should happen. This layer of sediment is caused by the natural life cycle of the yeast. As it dies off new yeast grow and the dead husks accumulate on the bottom. So it is a great sign that your yeast is working correctly. But, you don’t want to leave it in there throughout the whole cycle of the mead. It can cause off flavors. That is why we siphon off the liquid into a new jug and throw away the sediment. This sediment does also have the potential of causing something called autolysis where the live yeast run out of the normal food and start feeding on the dead yeast which will cause off flavors.

How do I stop the ferment? Well, if you want to stop the ferment so you can drink it faster I don’t really recommend that. You should let the mead run its natural course. This will give you the best tasting mead. But if you really want to stop the ferment it is difficult to do. But you can come close to achieving this by adding two chemicals to the mead: potassium sorbate and potassium metabisulfite. These are inexpensive wine making chemicals that are used all the time by wineries. The combination stuns the
yeast and prevents any further reproduction. So while technically it doesn’t halt the ferment it does come close enough so the ferment is considered halted. Often times this is done just before bottling to insure the mead is stable before being locked into the bottle.

How do I sweeten my mead? This is a bit of a tricky question and not necessarily for beginners but usually the mead is halted with the potassium sorbate and potassium metabisulfite combination then left to sit for two days to insure the ferment is halted. Then you add honey or sugar to it. This is a matter of taste but for a one gallon batch about 1/5 cup of honey should be about right.

*My airlock is getting clogged with junk. Is this ok?* No, you should allow the airlock to easily breathe. Remove the airlock and stopper and siphon out an inch or two of the liquid in the jug to give it room.

**An in-depth look at the equipment and chemicals**

**Airlocks** – This is probably the most mysterious part of mead making. But they are just a piece or two of plastic and all they do is allow gas to escape out of your fermenting mead while denying any outside contaminants to get inside. You fill an airlock half full of water. I show you two types here and it doesn’t matter which type you get. I use either.

**Rubber Stoppers**: These go on your jug. The solid one is so you can close off the jug and shake it vigorously. The one with the drilled hole in it is for the airlock. These come in various sizes and the typical size that you use for wine making or mead making is called a #6. If you are using a wine jug that you bought at the store the top of the jug is generally a little smaller than a wine makers jug. For this type of jug you should generally get a #5.5 rubber stopper.

**The Airlock Assembly** – Here is a picture of the airlock that has been pushed into the drilled rubber stopper and the whole assembly has then been firmly pushed into the opening of the jug.
**Sanitizing Agent:** This is some kind of chemical to clean all your equipment thoroughly so you don’t get any contamination in your mead. You can use ordinary house bleach for this. You can use 1 tablespoon of unscented bleach per gallon of water in your sink to sanitize your equipment. After using bleach you have to rinse everything.

**One Gallon Jug** – (You will need two of these or one of these and a two gallon fermentation pail) You can buy this at any brewery supply. If you try to use some other kind of jug just be sure ahead of time that the #6 rubber stoppers fit on it snugly.

**Honey** – This is the most important ingredient in your mead. While you can use just about any honey I recommend you get unprocessed honey. You can find it in grocery stores labeled as either “raw” or unprocessed. If possible you should get your honey directly from a beekeeper. This will make the best mead. The amount you should get will vary depending on your taste but I recommend to make a medium mead you get three pounds. This will be about one quart in volume.

**Which Type of Honey should you get?** Generally Clover honey is best for making a Melomel so I recommend you get a honey that is labeled as “Clover Honey”. Most honeys you get in the supermarket are labeled as “Wildflower” or “Blended”. While this honey is fine, clover is the best for a Melomel. Get the Wildflower though if it’s all you can get.

**Water** – This is not very critical and you can use tap water but if your tap water has high levels of minerals, chlorine or other substances I recommend you get some pure filtered water. You can use spring water but often spring water also has high mineral content. The best kind of water is the filtered kind. It is inexpensive and has almost nothing in it. It is just water. If all you have is tap water but you are concerned about it you can boil it. This will make it better for mead making.

**Yeast:** You will need one packet of wine makers yeast, or you can substitute this with about 1 rounded teaspoon of bread yeast that is fresh. I will show you more about this too. I recommend for making a fruit mead you use a champagne yeast. This is very easily bought at a brewer supply house or through an online shop like leeners.com or eckraus.com. I also have links on my website.
**Fermentation Pail** – This is not mandatory but it makes the mixing of the fruit real easy and it makes clean up afterwards very easy! You use this for the initial mixing and ferment and then the first racking goes from the pail to your glass jug. It has a hole and a rubber bung so you can place an airlock in it. They come in different sizes and the two gallon pail shown is perfect for a 1 gallon batch of fruit mead.

Another look at the chemicals

From Left to Right: These products typically come with instructions for use and how much to use in your mead.

1. **Campden Tablets: (2 ounce bottle)** This is a chemical that will kill wild bacteria and wild yeast in your mead. It insures only your yeast will grow. Typically use 1 tablet per gallon.
2. **Pectic Enzyme – (1 ounce)** This breaks down the pectin in fruit to bring out the flavors and it will make your mead much clearer. The pectin inside fruits can cause something called pectin haze. Typically use 1/10 to ½ teaspoon per pound of fruit.
3. **Yeast nutrient – (2 ounce)** This can be important for the growth of your mead. It will help insure a vigorous ferment. Yeast needs a lot of nitrogen to grow and honey is poor in nitrogen. Adding fruit does help some but it is best to also add a nutrient. Typically use 1 teaspoon per gallon of mead.
4. **Wine tannin - (1 ounce)** This is often optional but it adds a certain amount of astringency and pucker to the wine. This is often more common in wines made without fruit. Typically you will use ¼ teaspoon per gallon.
5. **Acid Blend – (2 ounce)** Yeast grows within a certain ph range and honey is close to out of this range. By adding acid blend you will create a better environment for your yeast to grow and you will make a better tasting mead. This will vary depending on taste and fruit used. As much as 1 teaspoon per gallon.
6. The recommended ounces of these chemicals will make you plenty of batches. They are simply my recommended beginner sizes and the total batch cost for all five of these cost me ten dollars plus shipping. You should be able to find them at similar prices in these sizes.

Closing Statement

Thanks for purchasing my ebooklet and good luck with your mead making! I hope the art is as rewarding for you as it is for me. I would love to get an email from you so you can tell me about your mead making or if you have any questions feel free to email me! Willkalif@comcast.net

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