



Buccaneer Bob's Silver, Gold, and Black Rum Recipe

Yields Five 750 ml Bottles of 80-90 Proof Rum from a 20 Liter Wash



Ingredients

- 3-4 liters blackstrap molasses (3 if it flows like putty at room temperature, 4 if it flows more like syrup)
- 2.5 kilos granulated sugar
- 2 liters "live" dunder from dunder pit (microbe infected but strained of any solids)
- 14 liters water (approximate)
- Juice of 2-3 lemons or limes
- 1 liter yeast trub from previous batch (or substitute 200 grams of yeast in 1 liter of water)
- 35 grams (4 tbs.) of fresh bakers yeast (or other yeast)
- 50 cubic centimeters (or 40 grams) of oak, apple wood, pecan wood, etc., in block or dowel form

Stage 1: Wash Preparation and Clarification

(2-3 hours work, 2 hours of waiting)

- Step 1) Pour molasses into a suitable, clean, 20-liter bucket and cover the bucket temporarily.
- Step 2) In a large cooking pot, pour "live" dunder, yeast trub and 1-3 liters of water.
- Step 3) Bring pot to a boil, stirring occasionally to control foam and prevent the mixture from sticking to the bottom of the pot.
- Step 4) After mixture has come to a boil, pour it into the bucket with molasses and stir to dissolve the molasses.
- Step 5) Add more water to bring bucket up to about 3/4 full.
- Step 6) Add the lemon or lime juice and stir again.
- Step 7) Let mixture sit for 2 hours, no more, no less, to give sediment time to settle.
- Step 8) Using a racking cane, siphon off the now-clarified wash into another suitable, clean, 20-liter bucket, leaving behind about 2-3 centimeters of sediment and wash. (Use this for fertilizer or allow it to settle a second time in a smaller container, rack, and add to wash later.)
- Step 9) If necessary, add a bit more water to bucket with clarified wash to bring it back up to 3/4 full.

Stage 2: Fermentation of Molasses Sugars

(1/2 hour work, 2-3 days waiting)

- Step 1) After ensuring the mixture in the bucket has cooled down below 35° C, remove about 1/2 liter of wash from the bucket and put it in a lidded jar or other resealable container. Add yeast to the jar, put the lid on top, and shake the jar until the yeast is completely dissolved.
- Step 2) Pour yeast mixture into the bucket and stir again, introducing as much oxygen as possible to the wash.
- Step 3) Cover the bucket well enough to keep the aromas and flavors inside and keep the bugs out, but loose enough to let out the CO₂. Store the bucket in a cool place, and allow the yeast to ferment the molasses sugars for about 2-3 days, or until the foam on the surface of the wash starts to disappear. (See notes regarding fermentation issues.)

Stage 3: Fermentation of Granulated Sugar

(1/2 hour work, 7-10 more days waiting)

- Step 1) Carefully stir wash to knock CO₂ out of suspension. (Watch for foam-up.)
- Step 2) Slowly add the sugar, and stir well to dissolve it, testing for the grit of undissolved sugar on the bottom of the bucket with stirring paddle.
- Step 3) Top-up bucket with fresh water to about 3 cm from top of bucket. Cover again, and allow fermentation to continue.
- Step 4) After fermentation has completed and yeast has settled to the bottom of the bucket – 10-15 days from the start of fermentation at 20° C – siphon wash into a pot still with a racking cane, saving spent yeast on the bottom of the bucket for future yeast nutrients.

Stage 4: Stripping Run

(4-6 hours mixed work and waiting)

- Step 1) Do a stripping run, dripping the distillate through a clean patch of medium-weight cotton cloth stretched over the mouth of the collection jar and poked downward in the center to form a funnel. (See notes.)
- Step 2) Collect distillate in liter-sized batches, and take each batch out in the sunlight to examine it closely for fusel oils floating on the surface of the distillate. If any fusel oils made it through the cloth filter, carefully skim the oils off the surface with a spoon, or wick them off with a cotton ball, paper towel, etc., and discard them. Collect all the distillate until it no longer tastes of alcohol, and there should be roughly 5 liters of low wines at around 55% ABV.
- Step 3) After the pot still has cooled down, empty it.
- Step 4) Put 250 ml of the dunder that comes out of the still into a tall, slender 500+ ml bottle, put the top on the bottle and set it aside. This dunder will go into the “dark rum essence” that will be used to flavor and color the gold/black rum later.
- Step 5) Use the rest of the dunder to top-up dunder pit or for fertilizer.
- Step 6) Rinse-out or otherwise clean still.

Stage 5: Spirit Run

(6-8 hours mixed work and waiting)

- Step 1) Charge still with low wines and any tails left over from the previous spirit run.
- Step 2) Add 5 liters of water to the still to dilute the still charge.
- Step 3) Begin the spirit run, again dripping through a clean piece of cotton cloth. Start off slowly at a rate of about 2-4 drops per second for liter #1. Adjust the heat under the still as well as possible in order to time this liter out to complete in about 60 minutes – 15 minutes per 250 ml. If distillation during liter #1 is allowed to run too quickly, not enough undesirable head components will be removed. Liter #1 is the foreshot and head-cut, and it should be poured into a separate bottle and kept for cleaning, disinfecting or fuel purposes.
- Step 4) After liter #1 has finished, turn up the heat under the still a bit until distillate forms a thin stream and continue collecting distillate in liter-sized batches.
- Step 5) After each liter finishes, take it out in the sunlight and examine it carefully for fusel oils floating on the surface. Ideally most were purged during the stripping run, but if any fusel oils made it through to this point, skim or wick them off and discard those fusel oils, as well.
- Step 6) Put liter #2, liter #3, and liter #4 into a glass jug, jar, or other suitable container and cover tightly. This will be the heart-cut. While collecting liter #4, catch a few drops of the distillate in a spoon periodically and taste it. If the distillate stops tasting of alcohol, shut down the still, put whatever part of liter #4 is collected in with liter #2 and liter #3, and skip to the section on blending.

- Step 7) Assuming liter #4 does continue tasting of alcohol to the end, begin collecting liter #5 until distillation noticeably slows and distillate no longer tastes of alcohol and then shut down the still. Whatever part of liter #5 is collected will be the tail cut. Put this in a separate bottle and add this to the next spirit run.
- Step 8) Rinse-out or otherwise clean still.

Stage 6: Blending

Silver Rum

- Step 1) Drop the pieces of oak (or other suitable wood) into the jug with the heart-cut. The oak pieces may be natural or lightly toasted according to taste. Monitor the oaking process and remove the oak pieces from the jug when they have imparted sufficient flavor and color. For a light rum, the oaking process should be kept to a minimum – just a few days should do the trick – allowing just enough time to round out the flavor of the freshly distilled rum.
- Step 2) Dilute to drinking strength.
- Step 3) Filter or rack the rum if necessary, bottle, and enjoy.

Gold and Black Rum

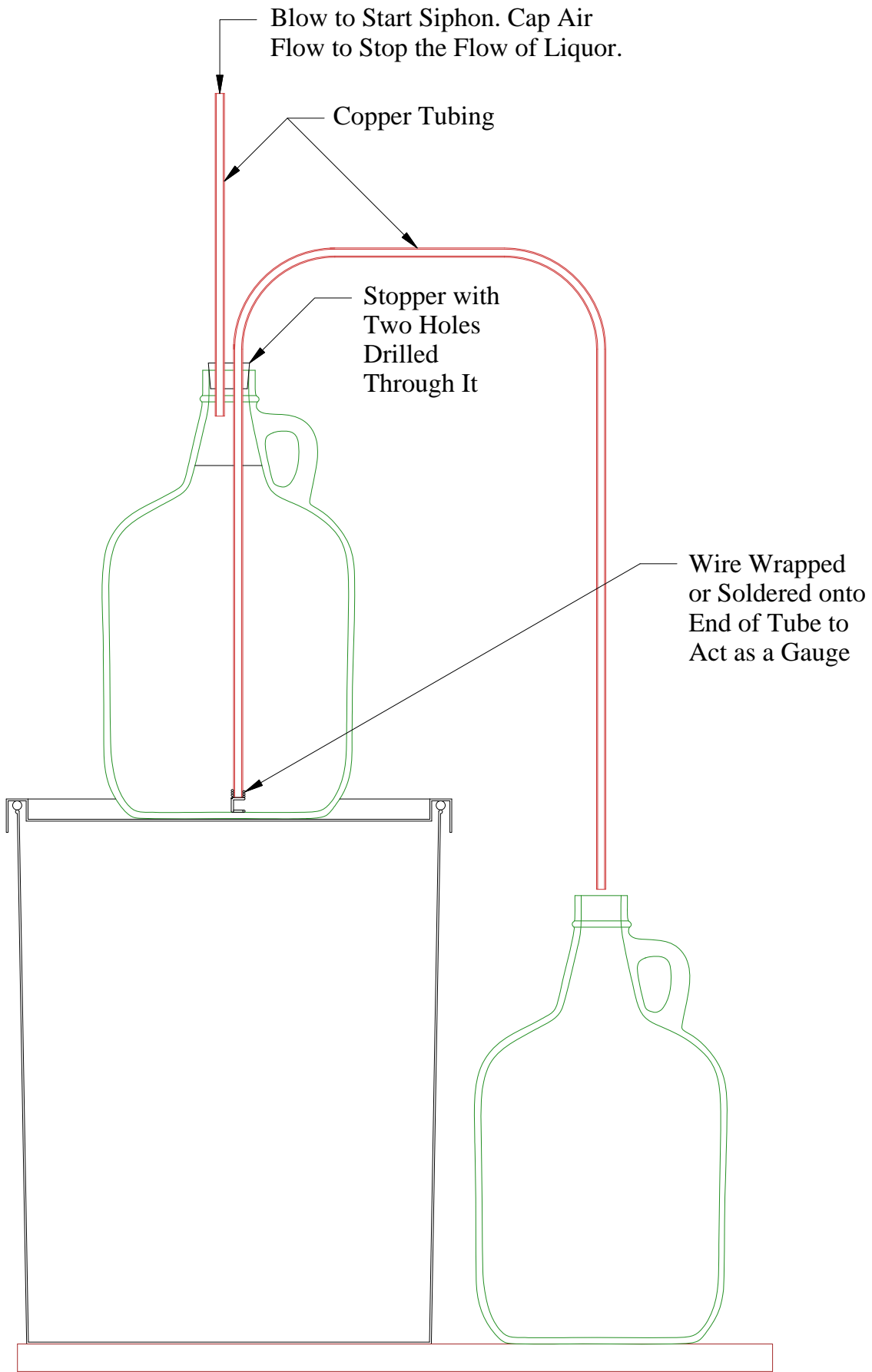
- Step 1) Make dark rum essence.
- Pour 250 ml of the heart-cut into the bottle that contains the 250 ml of fresh dunder.
 - Set the bottle aside for a week or two to give some of the solids in the dunder time to settle to the bottom of the bottle.
 - After most of the solids have settled, carefully siphon or decant the clarified dark rum essence into another bottle and use this to flavor and color the finished rum.
- Step 2) While the dark rum essence is settling, drop the pieces of oak (or other suitable wood) into the jug with the heart-cut. The wood pieces may be natural or toasted according to taste. Monitor the oaking process and remove the oak pieces from the jug when they have imparted sufficient flavor and color.
- Step 3) Dilute to drinking strength.
- Step 4) Measure the volume of the diluted heart-cut. Add clarified dark rum essence to the heart-cut at a ratio of 30-60 ml of dark rum essence to 1000 ml of diluted heart-cut. Adding 30 ml of dark rum essence to 1000 ml of diluted heart-cut will yield a medium-bodied gold rum, while adding 60 ml of dark rum essence will yield a more robust black rum.
- Step 5) The rum will be rather cloudy when first blended, so place the jug someplace out of the way and give it about a week to settle out. Once settled, the rum will still be dark, but it should be as clear as crystal. Carefully rack the rum into another jug and let it sit another week. If any more sediment settles out, rack the rum again. Otherwise, it is ready to bottle. There is no need to be greedy when racking, as any rum left behind with the sediment can either be settled once more in a smaller, narrower bottle or added to a future stripping run so that nothing is wasted.
- Step 6) Bottle the rum and enjoy.

Notes

- A laboratory environment is not necessary for rum production – far from it, actually, given the fact that bacteria in the “live” dunder give this rum a bit of its character – but proper cleaning procedures should be implemented along the way. The wash is particularly vulnerable early in the fermentation process, so fermentation vessels, stirring paddles, hydrometers and such should be washed thoroughly prior to use.

- Distillation equipment need not be sanitized. However, it should be rinsed thoroughly before and after every use. Over time, fusel oils and molasses gums can build up in the still head and condenser and produce off-flavors or specks of molasses gum in the finished rum. If possible, fabricate hose attachments that allow for pressurized rinsing of the boiler, still head and condenser.
- There is a tremendous amount of variation in the sugar content of blackstrap molasses. If whatever molasses happens to be available has a higher sugar content, perhaps only 2 kilos of sugar will be needed to achieve a 14% ABV fermentation. But with molasses that has a lower sugar content, 3 kilos of sugar may be needed. This will require some experimentation with each batch of molasses. If the specific gravity seems high or the wash tastes sweet at the end of fermentation, try using a bit less sugar on the next run. Or if the run produces less than 5-bottles of rum, try adding a bit more sugar on the next run to see if the output improves.
- If possible, store the yeast trub in a resealable container – a bottle, jar, etc. – someplace warm like an attic or the trunk of a car for a few days where it can be exposed to temperatures in the 30-50° C range. Enzymes inside the yeast cells will break the yeast down, making the nutrients inside the yeast cells even more accessible to live yeast later. The risk of the yeast trub putrefying during storage is low due to the alcohol content. However, it is a good idea to boil the trub prior to use to kill-off any bacteria that may have taken hold during storage.
- Dunder reaches its peak quality at 10-21 days from the time it is removed from the still. That is when wild microbes are creating the esters that are most beneficial when it comes to adding character to the finished rum. Beyond that timeframe, mold will begin to form on top of the dunder. Mold spores have a rather vile taste and should be kept out of the rum, if at all possible. Therefore, care should be taken to either: A) prevent the formation of mold by stirring the dunder on a regular basis; or B) siphon the dunder carefully from below the mold without disturbing it. A better strategy, though, is to stagger two separate buckets of dunder so that when one bucket of dunder becomes moldy, it can be discarded or used for fertilizer, while the second bucket of dunder is ideally just reaching its prime and ready to go into the next rum fermentation.
- Fermentation should be carefully assessed during the first day or two, and steps should be taken if the fermentation is going poorly. A healthy rum fermentation will maintain a light foam on the surface of the wash. If there is no activity whatsoever, it could mean that the yeast was pitched while the wash was too hot, and it didn't survive the heat. In this scenario, a few tablespoons of fresh yeast pitched into the wash should start the fermentation properly. One other situation that should be rectified at this time is if bacteria have gained a foothold in the wash and are beginning to overpower the yeast, evidenced by a thick, pasty-looking foam on the surface of the wash. In this scenario, the juice of another lime or lemon added to the wash will increase the wash's acidity to the point where the bacteria will begin to struggle and die, allowing the yeast to regain control of the fermentation.
- The esters that give rum its unique flavor and aroma are extremely volatile and will quickly evaporate if allowed to do so. Care should be taken to keep the rum wash covered during fermentation in such a way that only a small amount of slightly pressurized CO₂ is allowed to escape. Once distilled, rum should be stored in an airtight container at all times.
- It is beyond the scope of this text to discuss distilling apparatus and the finer points of using it, but any simple pot still of copper and/or stainless steel construction with a boiler that holds 30+ liters – and has proven serviceable in the past – should work nicely. Smaller pot stills will also work if the recipe is pared down or batches are split into multiple runs.
- Dripping the distillate through a patch of cotton cloth may not be necessary if the blackstrap molasses did not have much molasses gum in it or if the gums were removed during the clarification process. However, if a noticeable black area develops on the pieces of cloth, they are serving the purpose of keeping molasses gums out of the finished rum, and a fresh piece of cotton cloth should be used to filter each liter of distillate.

- There really is such a thing as too much of a good thing. The distillate produced during the stripping run will be fairly heavy with rum oils that give the distillate a rather peculiar “twang”. That is why it is important to dilute the still charge on the spirit run with a full 5 liters of water, which will act as a sponge and soak up a certain percentage of the rum oils, bringing the flavor of the distillate coming out of the spirit run into a much nicer balance.
- The collections from two or three stripping runs may be aggregated into a single spirit run to save a little distilling time, but it is a good idea to work single batches from start to finish for the first few runs until some of the finer details of the process are worked out and satisfactory results are being achieved on a repeated basis.
- It never hurts to have several bottles of dark rum essence on hand so that at least one bottle is reasonably clarified and ready to use when needed. Siphon or decant some dark rum essence from one bottle into another bottle, let that bottle sit for awhile, and then siphon or decant that bottle into a third bottle. It may never clear entirely, but it will get clearer over time. The dark rum essence should keep indefinitely, due to the fact that it contains roughly 25% ABV.
- Because the undesirable head components were removed with a generous head-cut during the spirit run, long-term aging is not necessary.



Racking Liquor Off of Sediment Using Copper Tubing