



# HOPLINE

*Newsletter of the Crescent City Homebrewers Club*

**January 2021**

**Next Meeting: Wednesday, February 3<sup>rd</sup>**

**Location: Deutsches Haus, 1700 Moss Street, New Orleans, LA 70119**

**2021 Edition**

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## PRESIDENT'S CORNER – JANUARY 2021

Crescent City Homebrewers:

Welcome to the new year and the first month of a hopefully better year for homebrewing and the world. We are optimistically already trying to plan some COVID-alternative beer events to keep us entertained until this is all a distant memory.

But on to bigger and brighter things ... we will all miss Hector and his beard leading the club (believe me I will!), but I know he is happy to leave the board in good hands. Totally not talking about me - but the rest of the board is pretty great: Genevieve (vice president), Will (quartermaster), Jo (treasurer) and Mona (secretary).

Some of the bright spots to look forward to are some fun brewoffs, a possible homebrew collaboration with Zony Mash, the sausage stuffing event, the postponed pig roast, Winterfest later in the year and we are working on some new things to introduce this year.

Cheers,  
Alessa

Picture from Rick Mattei



## **CRESCENT CITY HOMEBREWERS – EXECUTIVE BOARD 2021**

### **President**

Alessa Massey

### **Vice President**

Genevieve Mattei

### **Treasurer**

Johanna O'Brien

### **Secretary**

Mona Wexler

### **Quartermaster**

Will Lambert

### **Brewoff Czar**

Neil Barnett

### **Hopline Editor**

Jack Horne

## BREWOFF SCHEDULE FOR 2020 (Subject to Change, Really)

Date	Style	Host	Location	Brewmaster
2/27/21	Strong English Ale			Neil Barnett
<del>2/27/21</del>	Rye PA	Monk Fish Fest	<del>7967 Baratavia Blvd Crown Point, LA</del>	Postponed
3/27/21	Pils or golden ale			
4/17/21	Oyster Stout			
5/15/21	Saison			
6/12/21	BIABS	Neil Barnett	5636 Hawthorne Pl NOLA, 70124	Neil Barnett
July	Off			
Aug	BIABS Pumpkin f&*k beer	Barney		Will Lambert

\*BIABS = brewing in a bathing suit

Standard Wort price \$30.00      Standard Lunch price\$10.00

For any new members, a Brewoff is a group event in which we make 50 gallons of beer with the Club equipment. The wort is then split up into ten, 5 gallon units. The units are given out to the Host(1), Brewmaster(1), Chef(1), Equipment Movers(2), and Grunts(5). Guests and Alternates are encouraged to sign up and join in the fun. Wort participants must bring their own 5 gallon fermenter, and yeast. If you are interested, email me at [neilwbarnett@yahoo.com](mailto:neilwbarnett@yahoo.com) or sign up at the meetings. Buy a truck

Hey Buckeroo's,

The Brewoff for January 16 is being postponed until February 27. I suggest everyone stay safe, and brew at home. Something with Legacy hops perhaps. The ingredients for the Brewoff have been bought, so this WILL happen, but we don't want people getting sick by rushing it. Take care and keep brewing. DUMBO

The Rye PA will be postponed, until we can have the "Fish Fest" Sausage stuffing event at Monk's Haus.

All other events are open. Let me know if you are interested.

Yours as always,

DUMBO.

P.S. You can contact me at [neilwbarnett@yahoo.com](mailto:neilwbarnett@yahoo.com), or see me at a meeting to sign up.

## MEMBER'S HOMEBREW RECIPE SPOTLIGHT – JANUARY 2021

### “Sprucin’ on up” Brown ale with spruce – Alessa Massey

#### Brown Ale

Disclaimer: I stole this from Wikipedia.

In the 18th century, British brown ales were brewed to a variety of strengths, with [original gravities](#) (OG) ranging from around 1.060 to 1.090. Around 1800, brewers stopped producing these types of beers as they moved away from using brown malt as a base. Pale malt, being cheaper because of its higher yield, was used as a base for all beers, including Porter and Stout.

The term "brown ale" was revived at the end of the 19th century when London brewer Mann introduced a beer with that name. However, the style only became widely brewed in the 1920s. The brown ales of this period were considerably stronger than most modern English versions.

[North American](#) brown ales trace their heritage to American [home brewing](#) adaptations of certain northern [English](#) beers, and the English influence on American Colonial Ales.

#### Spruce tips

I am a huge fan of English beers and I had been wanting to do a beer with spruce tips for a while. After researching different ideas and recipes online, most leaned towards a light style or IPA to pair with the spruce tips. I wanted to go another way and decided to see if I could coax the spruce flavors out in a darker beer. It worked surprisingly well. The spruce tips came through, but without the bitterness. A good holiday beer.

7.0 gal

9.9 Lbs. 2-Row

2.2 Lbs. Munich

5.3 oz. Caramel/crystal

5.3 oz. Special B

3.5 oz. Carafa II

0.9 oz. Black patent

0.7 oz. roasted barley

Single infusion mash at 153°F for 60 min.

1.35 oz 5.50% Willamette. 60 min (21.1 IBUs)

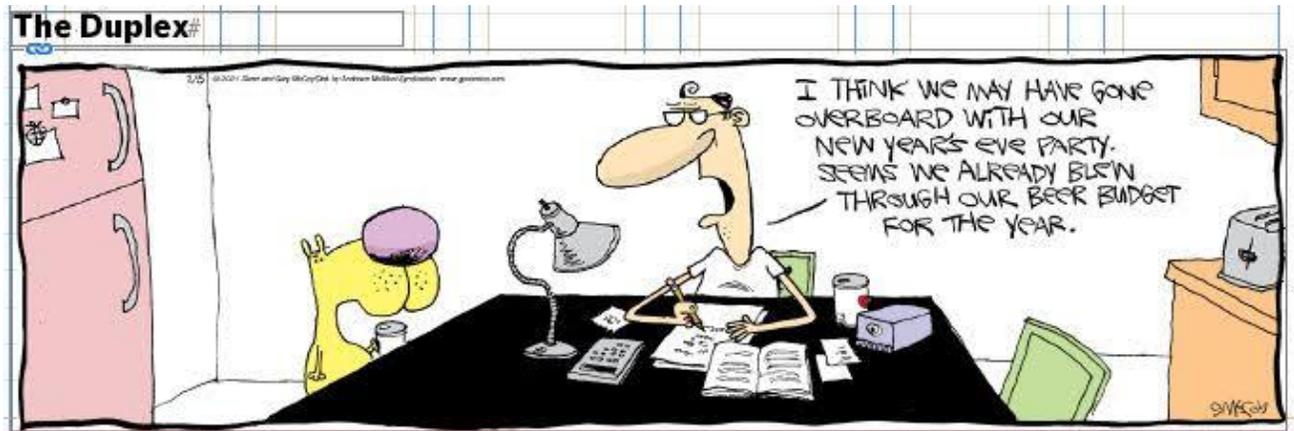
2 oz. Spruce tips at flameout

Yeast: Edinburgh Ale (White Labs #WLP028)

Fermented at 65 degrees for about 3 weeks

## BREW FOR THOUGHT – DECEMBER 2020

### Comics from Alessa



### From Paul Newfield

FYI,

<https://www.biblicalarchaeology.org/daily/ancient-cultures/daily-life-and-practice/cheers-scholars-brew-ancient-beer-with-millennia-old-ingredients/>

At the end of the article are links to other Beer-related articles.

Skip Newfield

## **WATER AND WATER TREATMENT** (Jan/Feb 1986)

The following was taken from a September 1982 Crescent City Homebrewer's Education Series.

The basic premise of brewing: hard, neutral water is necessary for brewing a light/pale lager or ale, while soft, neutral water is desirable for brewing a dark lager, porter or stout.

What is hardness?

Hardness relates to the amount of calcium and magnesium salts (bicarbonates, carbonates, sulfates) that are in solution. We can ignore the bicarbonates and carbonate content of our water because these salts will precipitate out upon boiling. However, we must be concerned with the amount of calcium and magnesium sulfate in the water because these two salts are unaffected by boiling and will remain in solution as permanent hardness!

<b>Permanent Hardness</b>	<b>Classification</b>
0 – 100 ppm	Soft
100 – 200 ppm	Medium Soft
200 – 400 ppm	Moderately Hard
400 – 600 ppm	Hard
Above 600 ppm	Very Hard

<b>Permanent Hardness</b>		<b>Classification</b>
Ozone	10.3 ppm	Soft
Kentwood	3 ppm	Soft
S&W Board	99.9 ppm	Soft

It is important to note that all three waters have a low permanent hardness and are considered to be soft.

How hard should the water be?

That depends of the type of beer you plan to brew!

		<b>Table 3</b>
Pale Ale		Hard Water
Light Ale		Hard Water
Medium (Mild) Ale		Moderately Hard Water
Dark (Brown) Ale		Soft Water
Porter		Soft Water
Stout		Soft Water
Light Lager		Soft to Hard Water
Pale Lager		Miller (1981)* recommends that the water contain 360 ppm of sulfate.
Dark Lager		Soft Water

Is permanent hardness really that important?

If you use canned or powdered malt extract for your light beers or ales, then the permanent hardness of the water is not that important. The main reason for this is that malt extract is made by boiling the grain solution until the water is evaporated, however the minerals that were contained in the water remain in the malt extract! Still, many homebrewers include gypsum (calcium sulfate) in their recipes, as it acts to mellow the hop flavor, and produces a drier beer with greater clarity. Permanent hardness is very important when making an all grain beer.

How much gypsum do you add?

According to Miller (1981)\*, a ½ teaspoon (tsp.) of gypsum per US gallon of water will yield approximately 510 ppm (150 ppm Ca + 360 ppm SO<sub>4</sub>) of permanent hardness. Therefore, a ½ tsp. of gypsum per gallon of Ozone or Kentwood will give you hard water. For moderately hard water, just add ¼ tsp. per gallon. If you must use tap water, use ¼ tsp. of gypsum for moderately hard water or 3/8 tsp. per gallon for hard water.

References

\*Miller, Dave HOME BREWING FOR AMERICANS, Andover, England: THE AMATEUR WINEMAKER.

# Sour Mashing

by Dave Green BYO - October 2008



Have you caught the sour love yet? Are you the type of person that will only buy or try to clone Guinness in its Extra Stout version? Fan of Flemish or lambic style beers? Soured beers can be some of the most refreshing to the palate on a hot summer day, or after a long day at work. If you don't believe me, try picking up a bottle of Rodenbach, or if you can find one, a Berliner Weisse.

Soured beers are quickly gaining popularity among beer lovers and brewers alike. Greg Noonan at Vermont Pub & Brewery in Burlington, Vermont is one brewer getting in on sour mashing currently with four beers in his line-up, a wheat beer, a Flanders red, a wit beer, and a framboise. While a sour mash is not traditional with these beer styles, it is one technique you can utilize to create the sour characteristics in these beers. It doesn't matter whether you are an extract or all-grain brewer, a sour mash is a fairly easy process that requires little in the way of special equipment.

Traditionally there were two reasons for a brewer to purposefully sour mash. The first was to biologically acidify the mash to comply with the Rheinheitsgebot Purity Law. Utilizing a sour mash for biological acidification of pale brews produces a "softer" malt profile. The second reason was to make a true sour beer like a Kentucky Common, which distillers in the Appalachian Region of the US made as an offshoot to their sour-mashed whiskey.

There are several methods you can employ to create a soured beer. Simple techniques include adding lactic acid to your brewing water or including acidulated malt to your grain bill. Both techniques are going to lower the pH levels of both the mash and final wort, giving a tart, sour edge to the final beer depending how much is added. More advanced techniques include adding either cultured lactic acid bacteria or *Brettanomyces*, a mixed lambic culture of *Brettanomyces*, *Pediococcus* and *Lactobaccillus* or oaking the beer with unsanitized oak ingredients while the beer is in secondary stages of fermentation. The final technique in the homebrewers quiver would be performing a sour mash, which is the only technique I will be discussing in this article.

The goal of a sour mash is to employ the work of *Lactobaccillus delbruckii* to a great extent while limiting the work of other critters such as fungi or bacteria like *Acetobacter* or *Clostridium*. You can accomplish this by pitching a live culture of *Lactobaccillus*, by controlling the temperature of the mash and by limiting the oxygen introduced to the mash. *Acetobacter*, as the name implies will produce acetic acid, the key acid in vinegar. *Acetobacter* will only play a significant role if the sour mash is incubated for an extended time period. You will know when *Acetobacter* has taken hold when the mash vessel, upon opening, has a cidery-like vinegar smell. While you would like to minimize the vinegar included in the mash, it will not spoil your attempts at creating a clean sour beer if kept in check. *Acetobacter* needs oxygen and will only grow on the top of the mash. If you seal the top of the mash by laying some plastic wrap across the top, pushing all the air bubbles out in the process then you can greatly decrease the opportunity for *Acetobacter* to act. *Clostridium* on the other hand produces butyric acid, which is a foul-smelling acid, faintly resembling my freshman year dorm, a mixture of rank locker room smell mixed with vomit. If *Clostridium* takes hold in the mashing vessel, it is rather apparent right away and make sure to keep away from significant others if you enjoy their company. I would advise dumping the mash if *Clostridium* takes hold. But some people

seem to be okay adding this rank concoction to their beer stating that the odor can be boiled away. In general, a foul-smelling mash is going to yield a foul-smelling beer. A little “funk” in the mash is OK (some aromas will get scrubbed in the boil and fermentation), but too much and it should be discarded. Skimming the top of the mash can get rid of many off odors. A good sour mash smells “cleanly” sour. *L. delbruckii* produces lactic acid, an odorless acid that got its name because it is the spoiling agent in milk when lactose is broken down.

There are some basic items you will want to have in your possession before attempting a sour mash. In my opinion a pH meter is important, especially if you’re an all-grain brewer. They will start at \$30 for a simple digital meter plus you will want to buy a calibration kit, which you can get for under \$10. Other key pieces include a thermometer and a small mash container that you can seal up tight. A small, insulated cooler will work well in a pinch. This will also help regulate the temperature of the mash over the course of several days. If you have a space in your house that can hold the temperature above 100°F (38 °C) for several days like a furnace room or hot water heater then you can also utilize a gallon jug or even smaller, depending on the size of your sour mash. One key to a good clean sour mash is that your container be filled right to the top for the incubation.

So what type of beers might you utilize a sour mash for? Really the sky is the limit, but a short list of good examples would include, but not limited to Berliner Weisse, lambic-styled beers, Flemish reds and browns, stouts, porters, summer ales, weizens, wits, saisons and the more obscure style Kentucky Common. From my experience hoppy beers don’t seem to benefit from the effects of souring but maybe that is the reaction of my taste buds. The sour mash will add a nice twang to the beer if a moderate percentage of the total grain bill is added and a full pucker face if a large percentage of soured grains are added. Utilizing 5% of the total grist for the sour mash is generally the lowest end of spectrum. This is in the realm of using the sour mash for mash acidification. That means that if your recipe calls

for 10 lbs. (4.5 kg) of grist then your sour mash would contain 0.5 lb (0.23 kg) of your base grain.

The question on how much sour mash that one should add is really dependent on the brewing water you will be utilizing, the end pH of the sour mash, and the extent of sourness you are looking to achieve. The stronger the buffering capacity of your brewing water, the higher the carbonate levels, the more sour mash you will need to add to achieve your desired effects. A 10% sour mash using soft water may produce the same results as a 15% mash when hard water is utilized. Trial and error is really the only way a homebrewer will achieve their desired level of sourness. The end pH of the mash is also very important, especially to all-grain brewers because ideal mash pH should lie in the range of 5.2–5.4. According to Greg Noonan, “a 2-day sour mash will give a better flavor but half the acidity of a 3-day mash.” In acidified beers, the sour mash is stirred into the main mash to hit a proper mash pH. In sour beers made with a full sour mash (Kentucky Commons, for example), the malts are mashed normally, then allowed to cool and sour. A brewer could also make a sour beer by stirring a large sour mash into the main mash after conversion has taken place. This would work well for moderately souring experimental beers. The percentage of mash which is soured will play the biggest role. Souring between 5–20% of the grain bill will give the beer anywhere from barely a touch of sourness to a nice twang. If you sour above 20% of the total grain bill, then you are entering true sour beer territory. Some homebrewers will sour mash upwards of 50% or more of their total grain bill. This quantity is ill-advised for anybody who doesn’t want a true pucker-up beer or anybody that suffers from acid-reflux problems.

For first time sour mashers I would recommend souring between 5–20% of the total dry grist. This will give you something to work with for your next sour mashing session. Begin the sour mashing process two to four days prior to brewing the entire batch. Calculate how much of your base malt needs to be soured. You can use crushed 2-row, 6-row, pale ale or Pilsner malt. Begin by heating 1.25 qts. (1.18 L) of water for

every 1.0 lb. (0.45 kg) of grain in the mash, up to a temperature of about 162 °F (72 °C). In a pot, slowly mix the water into the grains and stir thoroughly. Wrap the pot in a towel and let the mixture stand for 40 minutes. After the 40 minutes, heat the mash up to 170 °F (77 °C) and hold for 10 minutes. Gently pour the mash into the vessel it will be stored in for the next several days, introducing as little oxygen is possible to the mash while pouring. The less oxygen introduced during this process, the less chance there is for mash spoiling critters to take control. Cover tightly with plastic wrap making sure to expel any air bubbles trapped on top and cool the mash down to roughly 115 °F (46 °C).

Inoculating (pitching the critters) in the sour mash is the final critical choice in the sour mashing process. The simplest and most straightforward technique is to keep a handful of dry grains from the preceding mashing steps, either crushed or whole grains work. Simply toss in the grains when the temperature of the mash falls below 120 °F (49 °C). The grains already contain the bacteria *L. delbruckii* in their husks. Another way would be to pitch a culture of live bacteria. Both Wyeast and White Labs have made this strain available to homebrewers, or you may be able to find live cultures in some health food stores as packaged yogurt culture. Again pitch the culture when the temperature falls below the 120 °F (49 °C) threshold. Reseal the vessel and place in a warm spot. The closer you can keep the mash to the 120 °F (49 °C) mark without going over, the better your *Lactobacillus* will fair and the less likely unwanted visitors will take control.

When brew day arrives, extract brewers can pour the sour mash through a strainer or colander to separate the grains from the liquid and add the sour liquid directly to the boil. The all-grain brewer may follow the same procedure as the extract brewer, or if biological acidification is your goal then add the sour mash to the main mash making sure the mash pH doesn't fall below the 5.2 threshold. Begin by mashing the grains as normal in your mash tun. You will want to heat the sour mash up to your first rest temperature to avoid any complications with

volume and temperature of strike water to add. If your goal is to make a sour beer, then you can add more of the sour mash just after the saccharification rest but before lautering in order to raise the sour intensity.

So now that you have some general guidelines it's time to turn brainstorming into reality. Sour mashing can be both a fun and frustrating side project to brewing. As you gain practice in the technique, it becomes easier over time and you can start culturing your own strains of bacteria or yeasts for souring. *Lactobacillus* is a nice straightforward bacteria for souring a beer but there are several other strains of bacteria and yeast that can be utilized and provide interesting characteristics. So experiment and don't be afraid to ask questions because a sour beer when done properly is a beautiful thing.

*Dave Green is the Advertising Sales Coordinator for Brew Your Own. He is an avid homebrewer and worked as an assistant brewer at Brickhouse Brewery in Patchogue, New York.*



*It also keeps the kids out of your homebrew*

# CHANGING YEAST BEHAVIOR

by Hank Bienert (July 2007)

I've collected some info over the past few months on the effects on yeast of certain variables selection which are summarized below - BTW, a conversion table of Wyeast vs. White labs is available at a site previously mentioned <http://www.mrmalty.com/>

Studies #1 and #2 which used human sniffers as well as chromatography showed a very close correlation between the two which means to me that there is no reason for the club to buy a gas chromatograph machine.

#1 Wyeast study on wheat beer - presented at a few craftbrewer conferences  
Dave Logsdon (head of research) evaluated 13 wheat beers with a single variable of Wyeast yeast type. The OG was 1.058 which makes the inclusion of 3787 (Trappist high gravity) somewhat inappropriate. Fermentation was down to 1.011-12 in about 5 days at a temp of 68 to 70.

The yeasts with the highest clove/spicy (4-vinyl guaiacol) flavor were 1214, 3787, and 3522 in decreasing order; lowest were 1010, 3944, and 3068 in increasing order.

The yeasts with the highest resinous/harsh plastic/characteristic wheat beer flavor (styrene) were 3333, 3944, & 3538 tied with 1214; lowest were 1762, 1010, and 3942.

The yeasts with the highest banana (isoamyl acetate) were 1214, 3068, and 3638; lowest are 3333 and 3864. The yeasts with the highest rose flavor averaged over 2 runs were 3944, 3638, and 3068 - I also have this in detail (grain bill, graphs, etc.) in Powerpoint which I'll be glad to send to those who contact me (hbienert@cox.net)

This study surprised me because I had thought that the big determinant of clove vs banana flavor was fermentation temp and it still might be for some yeasts. Please don't think that you can just choose the highest and get equal amounts of a flavor either; for example, 1214 is the strongest clove and banana flavor BUT the clove is 4X stronger - life is never black or white! !

#2 White Labs Study of Ca Ale 001, Trappist Ale 500 and German lager 830 by Neva Parker, research head. I heard this on Basic brewing radio (<http://odeo.com/channel/21833/view>) and it is also in a recent issue of Zymurgy which I have NOT read. If anyone has this article please share it with me. I don't know what the grain bill, mash schedule was. The flavors evaluated were fusels (harsh astringent), esters (banana ) and diacetyl (buttery).

Test A - One week fermentation was performed at 68 and contrasted with one at 72. At low temp, the Trappist produced lots of banana ester and the others had slight flavors; at high temps, the diacetyl dropped in the Ca and especially in the lager and the banana went very high in the Trappist. Her comment was to encourage a high temp "rest" in a quick fermentation lager or a slower fermentation time - nothing earth shaking there.

Test B - The same 3 yeasts were used on wort with OG of 1.030, 1.044 and 1.070. As the OG was raised the amount of yeast pitched was proportionally increased. As OG went up so did flavors - slightly with the Ca and lager but especially the Trappist. In fact the Trappist was much more affected by high OG than by high temp as in test A.

#3 was run by Dan Listerman who owns a large homebrew shop in Cincinnati (Phil's mill, Phil's counterpressure filler) and an avid homebrewer. He made an oatmeal stout and divided it into 6 portions which he inoculated with different dry yeasts.

He reports:

"S-04 - Roasty aroma, Fruity, tight head, full bodied

Windsor - Little aroma, Sweet caramelly, full bodied, low fruit

S-33 - Low head, low roast aroma, low fruit, medium body

Munton's Ale - Low aroma, Neutral flavor, medium body, fruit in finish

Munton's Gold - Low aroma, Sweet, slightly sour maybe infected

Cooper's - Roast aroma, fruit finish, medium body.

The closest to Sam Smith was the Coopers, but it needed more body - a recipe thing more than yeast."

A personal experience noted a couple of times with Nottingham Ale yeast has been that when pitched from a starter (I never throw dry yeast into the fermenter) and kept at 65 X 24 hours until it takes hold and then taken to low 50s for 5 days followed by 2 weeks in a secondary at 45, it is a much smoother drier beer – almost lager-like than when it is kept at 65 until krausen drops and then put at 45 X 2 weeks.

Well there you have it - when you decide to move away from Fleischmann's bread yeast, this info may be of value.

Hank

# Links

## CCH:

[Membership Application Form](#)

## Local Brewing Supply:

[Brewstock](#) **New location Jan 1, 2020**

## Louisiana craft beer info:

[Louisiana Craft Brewers Guild](#)

## Breweries:

[504 Craft Beer Reserve](#)

[Big Easy Bucha](#)

[Bayou Teche Brewing Co.](#)

[Brieux Carré Brewing Company](#)

[Broad Street Cider & Ale](#)

[Chafunkta Brewing Co.](#)

[Courtyard Brewery](#)

[Crescent City Brewhouse](#)

[Gnarly Barley Brewing Co.](#)

[Gordon Biersch](#)

[Miel Brewery & Taproom](#)

[New Orleans Lager & Ale Brewery](#)

[Old Rail Brewery](#)

[Parish Brewing](#)

[Parleaux Beer Lab](#)

[Port Orleans Brewing](#) •

[Royal Brewery](#)

[Second Line Brewing](#)

[Urban South Brewery](#)

Please watch this page. It will be updated, revised, edited etc every month. I have much more to add. Will be adding beer festivals next month

Missing links – just email them to [Hopline@CrescentCityHomebrewers.org](mailto:Hopline@CrescentCityHomebrewers.org)!

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