



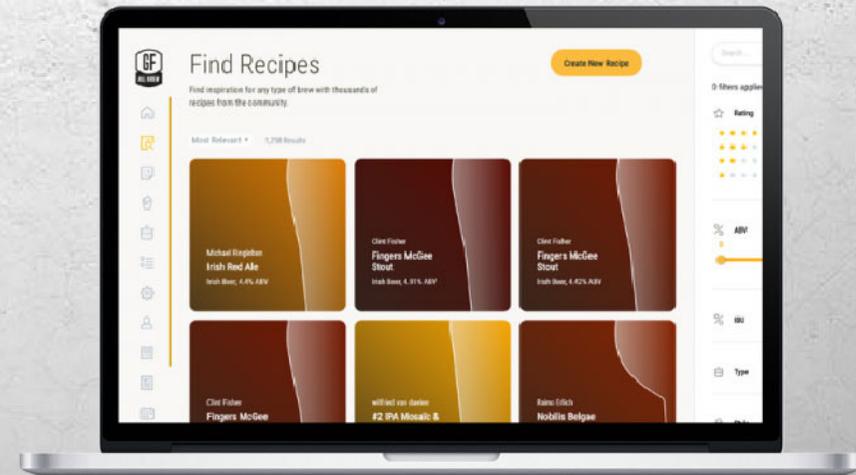
# USER GUIDE



## COMMUNITY

### TOOLS & RECIPE CREATOR

Brew any beer recipe, in any style, on any system



integrates with



iSpindel

# CONTENTS

## Home Screen

- Brewer CV
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- Brewing Equipment
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## Recipes

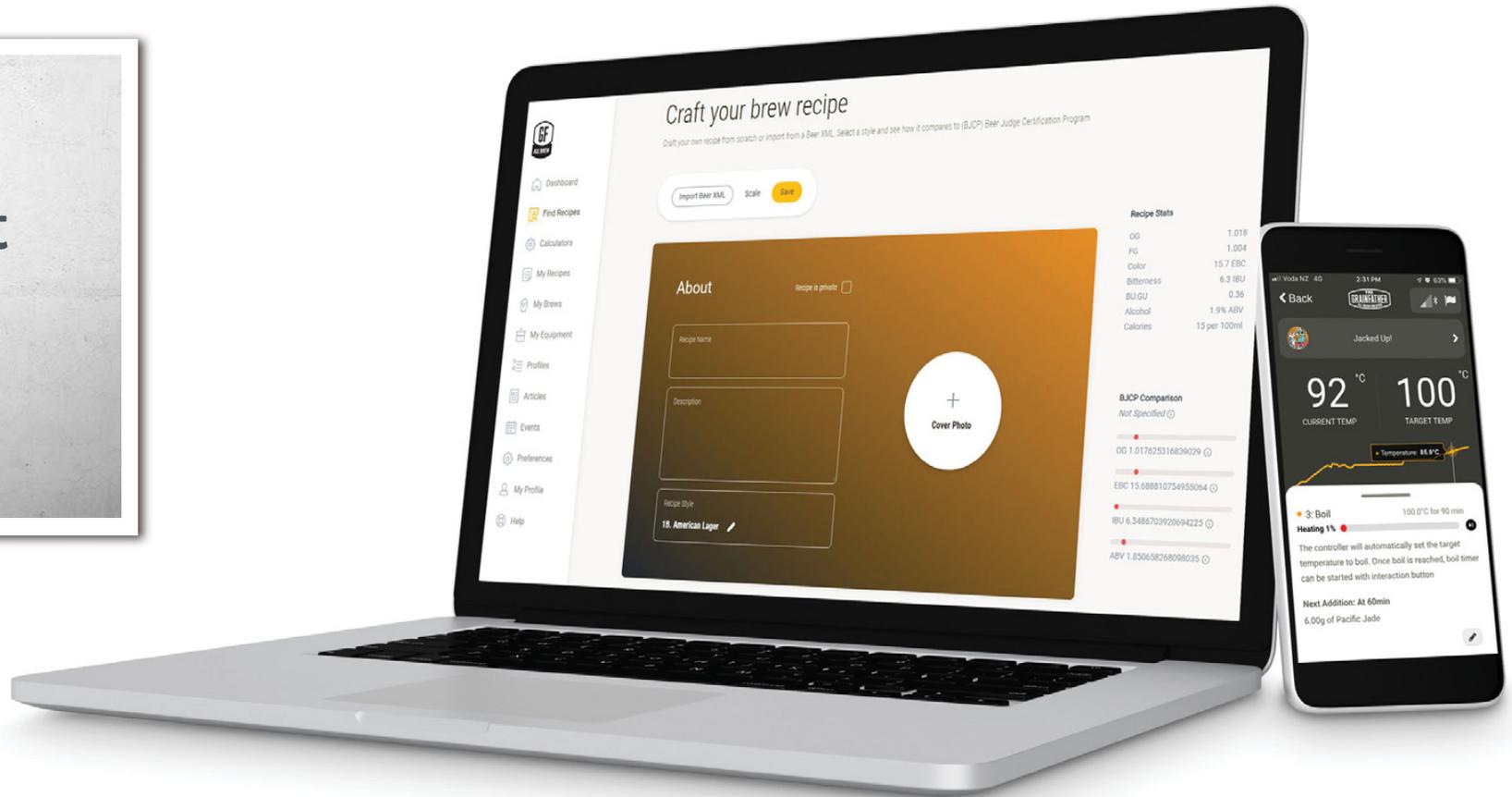
- Searching for recipes
- Adding recipes to your library
- Creating a recipe
- Ingredients
- Process/Steps

## Brew Session

- Planning
- Brew Day
- Fermentation Monitoring



Let's get started



Get to know the home screen

Dashboard

Learn the basics of brewing with our Brewing 101 course

The screenshot shows the Grainfather App Support dashboard. At the top, it says "Welcome, Grainfather App Support". A sidebar on the left contains various icons for navigation. The main content area features a "Brewing 101 - 0% Completed" section with a progress bar showing stages: Introduction, Ingredients, Equipment, and Process. Below this is a "Brew Sessions" section with a card for "The Kraken - First Brew" showing equipment and status. A "Recommended recipes" section is partially visible. At the bottom, there is a "Recommended Articles" section with a grid of article thumbnails. Annotations with lines point to the sidebar, the "Brewing 101" section, the "Brew Sessions" card, the "Recommended Recipes" section, and the "Recommended Articles" grid.

Active brew sessions and fermentation sessions

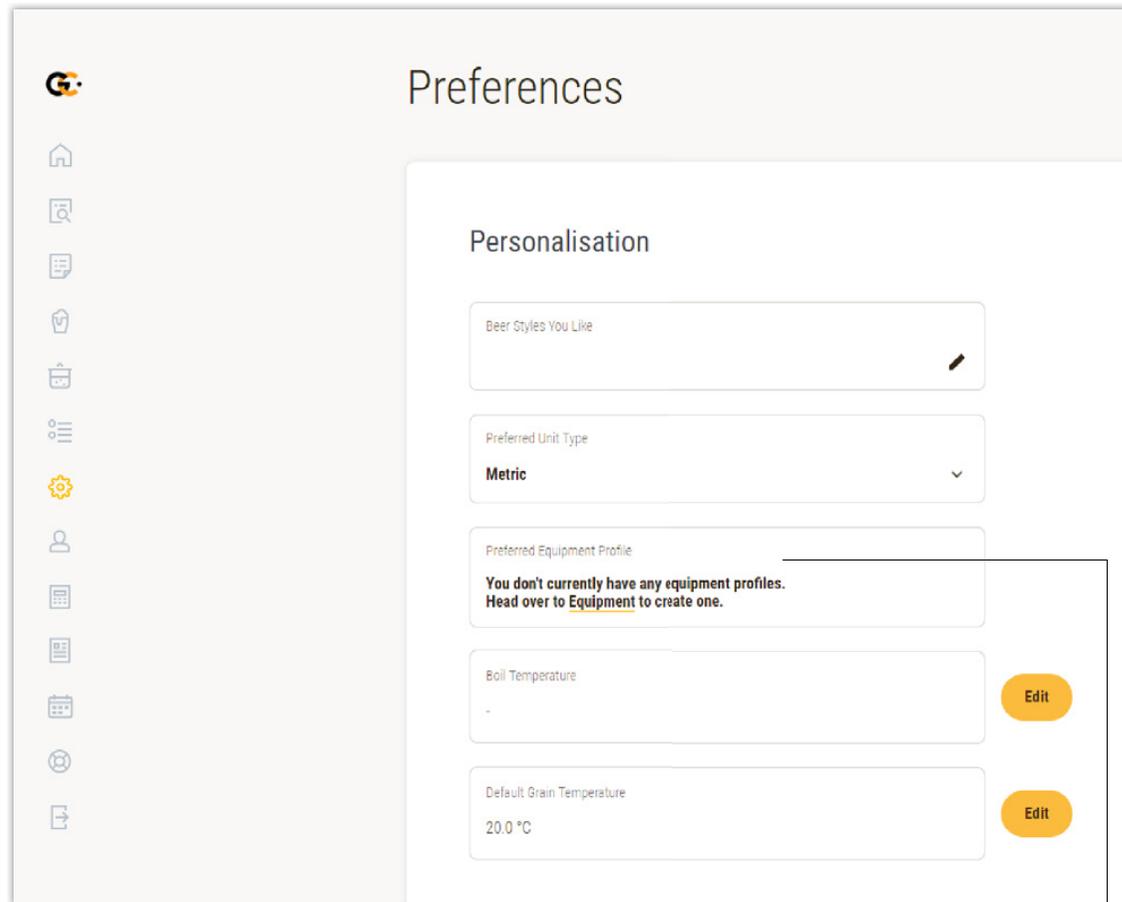
Recommended Recipes

Scroll down for Recommended Articles





# Preferences

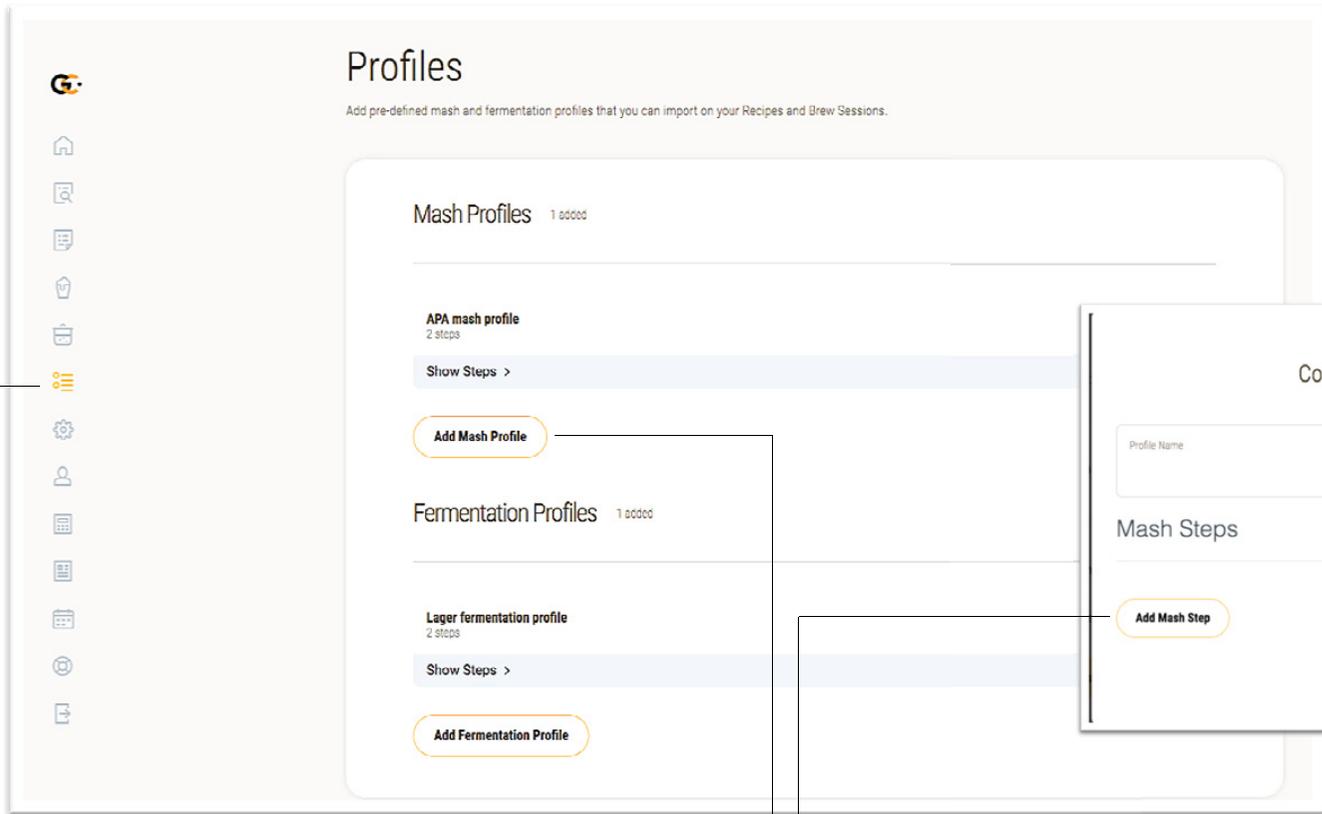


1. Select preferences. Here you may change your default units of measurement, your boil temperature if you live in a different altitude and grain temperature.

2. You can also set a preferred equipment profile and update your style preferences which will influence which recipes get recommended to you.



# Profiles



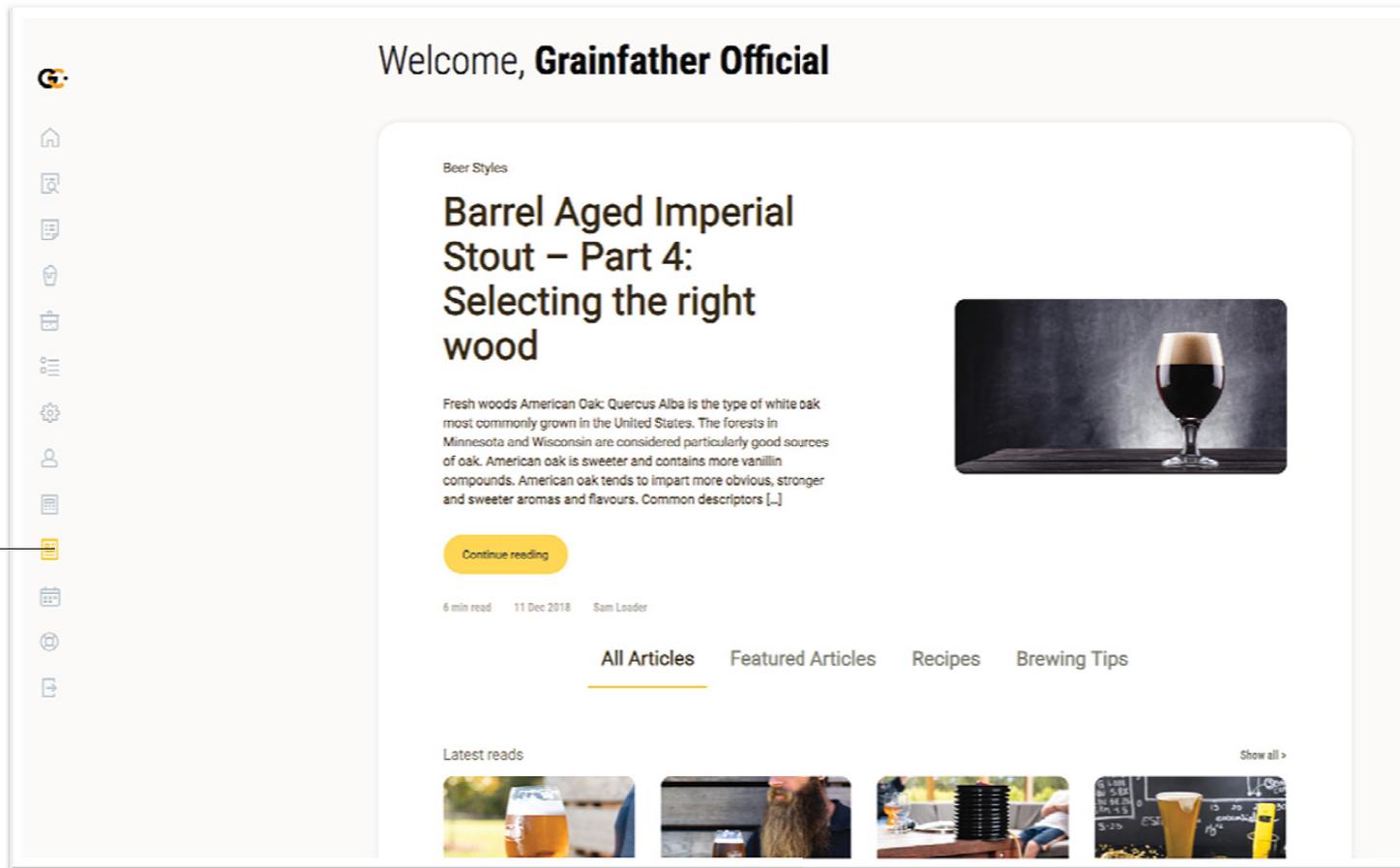
1. Set up fermentation and mash profiles that you can add quickly to recipes. See the recipe creation section for how to do this.

2. Choose to add a mash profile. Name your profile, choose your measurement units and begin adding mash steps by selecting the 'add mash step' button in the **pop-up editor**.

3. Choose to add a fermentation profile. Name your profile, choose your measurement units then begin adding fermentation steps by selecting the 'add step' button in the **pop-up editor**.



# Articles



1. Read interesting articles written by the Grainfather team and other guest contributors.

2. Check out the featured articles and the latest reads.



# Events

Events

Q Search 2019-07-01 × 2019-09-30 × Filter

The 2nd Annual  
**NEW ZEALAND  
STOUT CHALLENGE**  
MOON UNDER WATER  
July 12th-12th 2019 – New Zealand Stout Challenge 2019

**BREW CON LEEDS '19**  
WE'LL BE THERE!  
NORTHERN MONK BREWERY,  
THE OLD FLAX STORE, LEEDS.  
FRIDAY 12TH / SATURDAY 13TH JULY  
July 12th-13th 2019 – Brew Con Leeds '19

**RED WHITE & BREWS**  
July 14th-14th 2019 – Red White & Brews 2019

*International*  
**BEER DAY**  
August 2nd 2019 – International Beer Day

**JEFFCO CPRA RODEO**  
SATURDAY, AUGUST 3, 2019 | 6:00 PM | JEFFCO FAIRGROUNDS  
August 3rd-3rd 2019 – Jeffco Fair & Festival Homebrew Competition

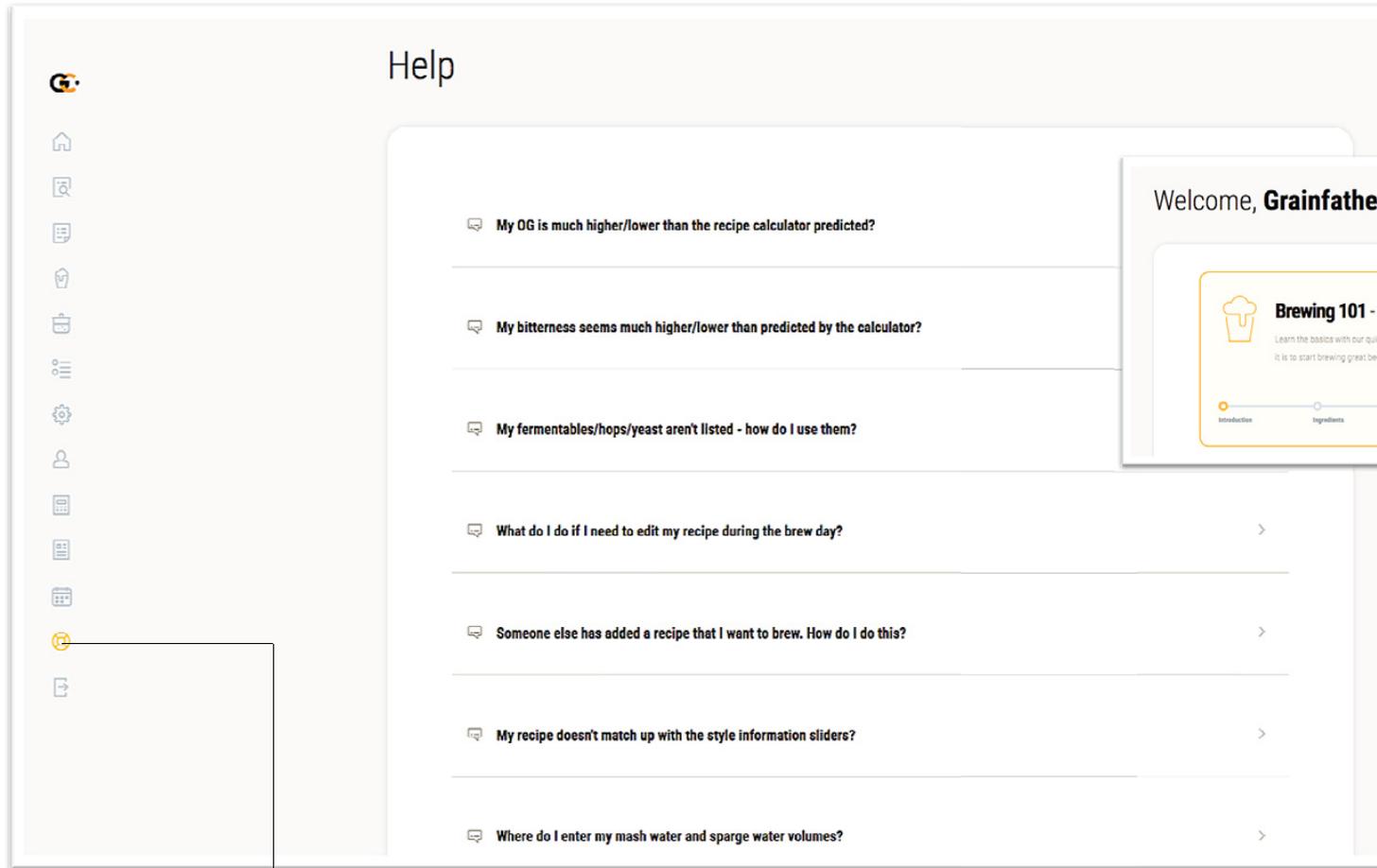
**BEERVANA**  
*Blow your mind*  
August 8th 2019 – Beervana – Wellington

1. Check out upcoming home brewing, craft beer and other fun events in your location and internationally.

2. Either use the search box or use the date selector and click the filter button to search for events during that period.



# Help and FAQs



1. If this guide does not answer a specific question you have, try browsing through our FAQs for a more detailed list of Q&As. If you are still having trouble. Contact our customer service team at [info@grainfather.com](mailto:info@grainfather.com)

2. If you are a beginner or first-time brewer, you may enjoy a run-through of the basics with our quick 'Brewing 101' course found on the Home Screen. At the end you will receive your first achievement badge to display on your Brewer CV too!



# Calculators and Converters

The screenshot shows a web application interface with a sidebar on the left containing various icons. The main content area is titled 'Calculators' and is divided into two sections: 'Brewing Equipment' and 'Conversions'. The 'Brewing Equipment' section contains five calculator cards: 'Brewhouse Efficiency Calculator', 'Hydrometer Adjustment Calculator', 'Mash Efficiency Calculator', 'Mash Tun Calibration Calculator', and 'Refractometer Calculator'. The 'Conversions' section contains two converter cards: 'Colour Converter' and 'Gravity Converter'. Each card features an icon, a title, and a brief description of its function.

1. We have compiled an extensive list of simple-to-use brewing calculators to assist you on your brew day. Use them on the fly either during your brew planning stage or during the brew session itself.

2. To assist in correctly brewing recipes from around the globe and understanding other brewer's notes, use the converters also found on the calculator page.



# Calculators

## Brewing Equipment



### Hydrometer Adjustment Calculator

Calculate the actual Specific Gravity, accounting for sample wort temperature and the hydrometer's calibration.



### Mash Efficiency Calculator

Calculates the percentage of the total available sugars that was extracted from the grains during the mash and sparge.



### Mash Tun Calibration Calculator

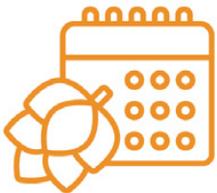
Calculates the heat capacity of your brewing vessel.



### Refractometer Calculator

Calculates actual values in Brix, Plato, or Specific Gravity, provided a refractometer reading from your wort.

## Ingredients



### Hop Age Calculator

Calculate the current AA content of your hops, based on the worst case scenario when storing them over time.

## Bottling/Kegging



### Bottle Carbonation Calculator

Calculates the amount of priming sugar to add at bottling time for home brewed beer.



### Forced Carbonation Calculator

Calculate the required keg pressure (PSI) to achieve the required level of carbonation for your brew.



# Calculators

## Mash



**Decoction Volume Calculator**  
Calculate the amount of mash that needs to be removed, heated, and then re-added to increase the mash temperature ready for the next decoction step.



**Gravity Adjustment Calculator**  
Calculate the additions or boil off required to achieve your desired gravity.



**Grist Ratio**  
Calculate the grain to water ratio.



**Mash and Sparge Water Calculator**  
Calculate the mash and sparge water required for your brew.



**Mash PH Adjustment Calculator**  
Calculates the amount of the initial addition of acid to the mash to achieve your desired pH.



**Rest And Infusion Temperature Calculator**  
Calculate the amount of boiling water to add to reach a new rest temperature in your mash tun.



**Strike Water Temperature Calculator**  
Calculates the required temperature of your strike water to achieve your desired mash temperature.

# Calculators

## Fermentation



### ABV Calculator

An easy and accurate way to calculate the actual ABV of your brew.



### Apparent/Real Attenuation Calculator

Calculates the real and apparent attenuation of a brew, with real attenuation accounting for the actual ABV and the imperfect nature of hydrometers.



### Calories in ABV Calculator

Calculates the amount of calories present in the specified amount of serving size.



### Pitch Rate Calculator

Helps you to pitch your yeast like a professional; supports dry yeast, liquid yeast, and slurry.



### Bottle Carbonation Calculator

Calculates the amount of priming sugar to add at bottling time for home brewed beer.



### Forced Carbonation Calculator

Calculate the required keg pressure (PSI) to achieve the required level of carbonation for your brew.



Let's  
setup some  
equipment

Brewing Equipment

Default selected brewing equipment, controller and units of measurement

Import 'BeerSmith' profile

### My Equipment

Add your Brewing and Fermenting equipment to use in your Brew Sessions and creating new Recipes.

Brewing 0 added

No Brewing Equipment

**Add Brewing Equipment** Import BeerSmith Profile

Fermentation Devices 0 added

Detailed instructions for how to setup each device will be available on a brew session, once you add your device(s) to the brew.

No Fermentation Devices

**Add Fermentation Device**

Device Name	Controller	Status	Actions
Ignidie #1	Ignidie	Not heard never	✓ ✖
Niv_Central	Grainfather Central	Offline	✓ ✖
Red Tilt	Tilt	Not heard never	✓ ✖
undercurrent-batch-2	Grainfather Central	Offline	✓ ✖

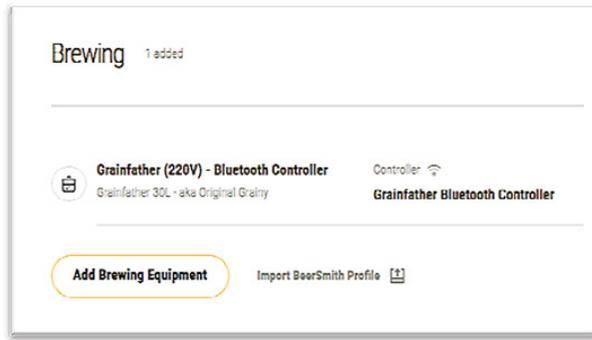
**Add Fermentation Device**

Add brewing equipment

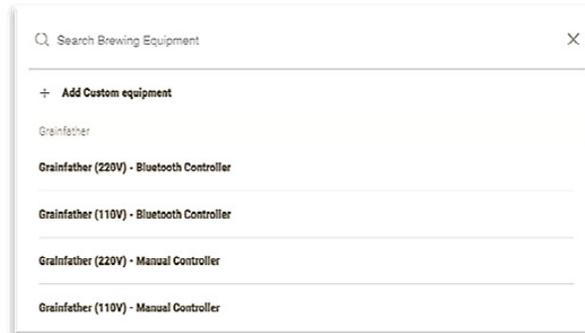
Add fermentation tracking equipment



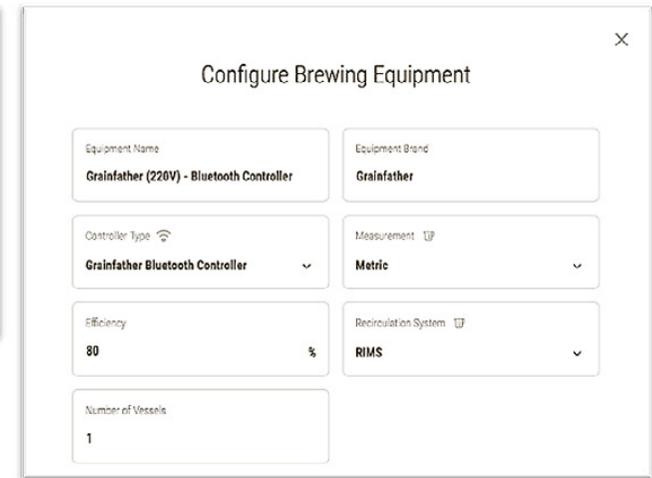
# Adding Brewing Equipment - Part 1



1. Select 'Add Brewing Equipment' button, or the 'Import BeerSmith Profile' button.



2. Search for your brewing system or to create a system from scratch, select 'Add Custom Equipment'.



3. Name your system, edit and start to fill in the details and a description of the system.



# Adding Brewing Equipment - Part 2

**Mash**

Wort Shrinkage		Mash Thickness	
4	%	2.7	L / kg
Mash Tun Deadspace		Mash Tun Loss	
3.5	L	0	L
Mash Volume		Grain Absorption	
30	L	0.8	L / kg

4. Add or edit the details for the mash section. These details will be pre-configured when you have selected a known system.

**Sparge**

No Sparge  Sparge Water Alert

Sparge Progress Counter

Sparge Vessel Volume		Sparge Grain Absorption	
16.5	L	0	L / kg
Leuter Tun Loss			
0	L		

5. Add or edit details for the sparge section. Choose to enable 'Sparge water alert' to receive a notification on the app when to start heating your sparge water. Choose 'Sparge water counter' to have the Grainfather Controller display a counter to track the amount of sparge water as you add it.

**Boil**

Boil Power Control

Tub & Chiller Loss		Boil Loss	
2	L	3	L / hr
Boil Volume			
28	L		

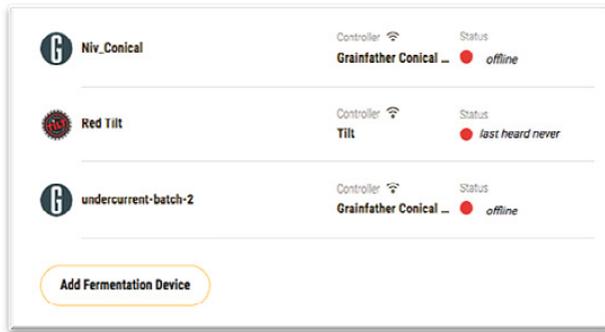
Notes

Save

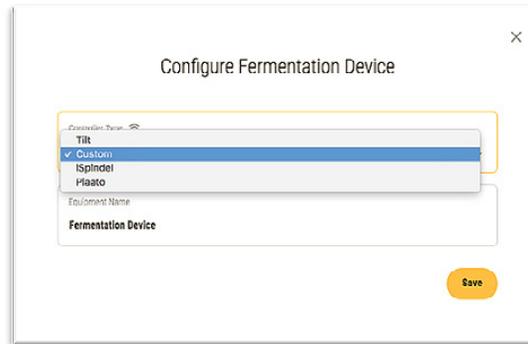
6. Add or edit the details for the boil section. Choose 'Boil power control' to control the Grainfather controller's power output manually during the boil stage.



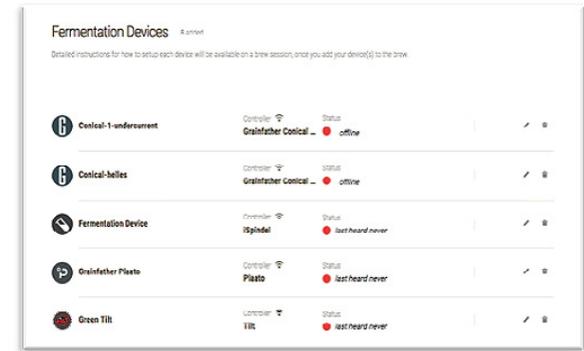
# Adding Fermentation Equipment



1. Select 'Add Fermentation Device' button to add a device.



2. Select one of the supported IOT devices from the list. Or choose the 'custom' device option.



3. You can see a list of the devices you have set up and their current status. You may edit or delete these or any brewing equipment via the main 'equipment' page.

Let's search  
for a recipe  
or create one  
from scratch

**Find Recipes** (59,370 results)

Find inspiration for any type of brew with thousands of recipes from the community.

**Create new recipe**

Search...

Sort By: **Most Relevant**

0 filters applied

- Rating
- ABV
- IBU
- Type

**Find Recipes** (35 results)

Find inspiration for any type of brew with thousands of recipes from the community.

**Create new recipe**

Search...

Sort By: **Most Relevant**

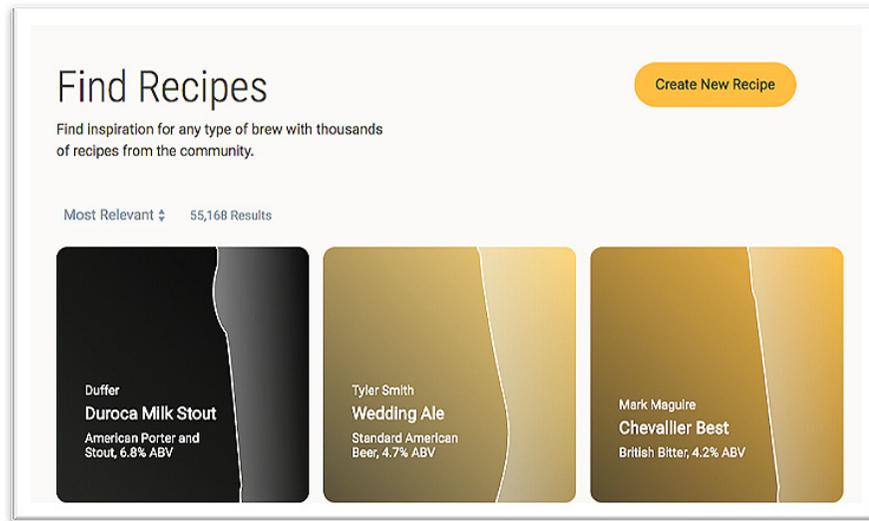
1 filter applied

- Rating
- ABV
- IBU
- Type
- Style
- Hops
- Region
- Recipe Provider

Author	Recipe Name	Style	ABV
Duffer	Duroca Milk Stout	American Stout	6.8%
Kyle Marshall	Amber Ale MM's	American Amber Ale	5.5%
Tyler Smith	Wedding Ale	Cream Ale	4.7%
Mark Maguire	Chevalier Best	Red Bitter	4.2%
Tonny Hovdal	Kruiser'n	Imperial Stout	12.04%
Peter Ch	Dead Pony Club	American IPA	2.81%
Antonis Pettas	Hitachino nest sweet stout	Sweet Stout	1.55%
Russell Baker	Burton-upon-		
Joskim Lejton			
Socrates Rafais	BPA	Belgian Pale Ale	4.9%
Grainfather Official	Road To Homebrew Con - Mexican Amber Lager	International Amber Lager	4.9%
Grainfather Official	Road To Homebrew Con - Irish stout	Irish Stout	5.8%
Grainfather Official	Road To Homebrew Con - English IPA	English IPA	4.4%
Grainfather Official	Road To Homebrew Con - Belgian Dubbel	Belgian Dubbel	5.1%
Grainfather Official	Road To Homebrew Con - German Weisbier	Weisbier	4.5%
Grainfather Official	Road To Homebrew Con - Czech Pilsener	Czech Pilsener	4.7%
Grainfather Official	Road To Homebrew Con - Japanese International Pale Lager	International Pale Lager	5.0%
Grainfather Official	Road To Homebrew Con - Aussie Sparkling Ale	Aussie Sparkling Ale	4.5%
Grainfather Official	Road To Homebrew Con - NZ Pale Ale	New Zealand Pale Ale	5.1%
Grainfather Official	Glacial (Temperature Controlled Fermentation)	German Pils	4.8%
Grainfather Official	Paddy's (Irish) Red Ale	Irish Red Ale	4.5%
Grainfather Official	SMaSH	Specialty IPA	4.8%



# Searching for a recipe - Part 1

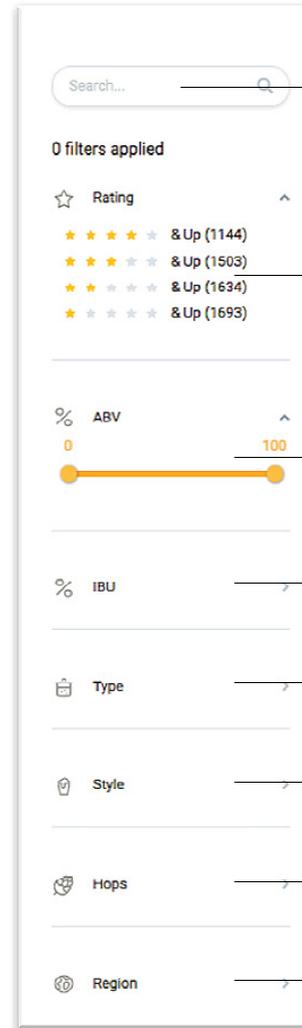


1. Search for, be inspired by and brew from the ever-growing collection of community recipes.

The recipe card will first display the brewer. Click this name to investigate the Brewer's CV and more public recipes from that brewer.

Next, the recipe card will display the basic recipe info including name, style and ABV. The recipe card will also be served as a colour. This is a close representation of the beer's colour.

Use the search bar to begin a search with a keyword, then use the filter list to narrow down your search further.



Use the search box to search for recipe name, style, brewer and other recipe characteristics

Search for recipes based on ratings

Search for recipes based on ABV %

Search for recipes based on IBU rating (Bitterness)

Search for recipes based on type including all grain, extract or partial mash

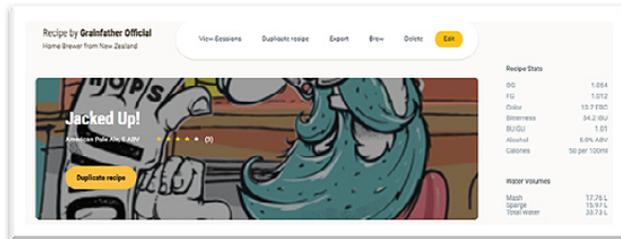
Search for recipes based on Brewer's Association and BJCP styles including mead and cider.

Search for recipes based on the type of hops used.

Search for recipes based on region in the world.



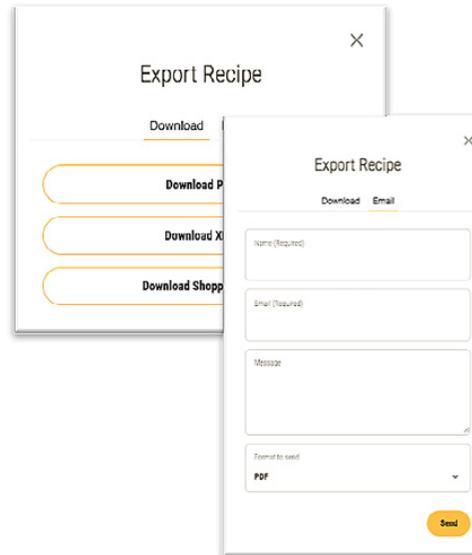
# Searching for a recipe - Part 2



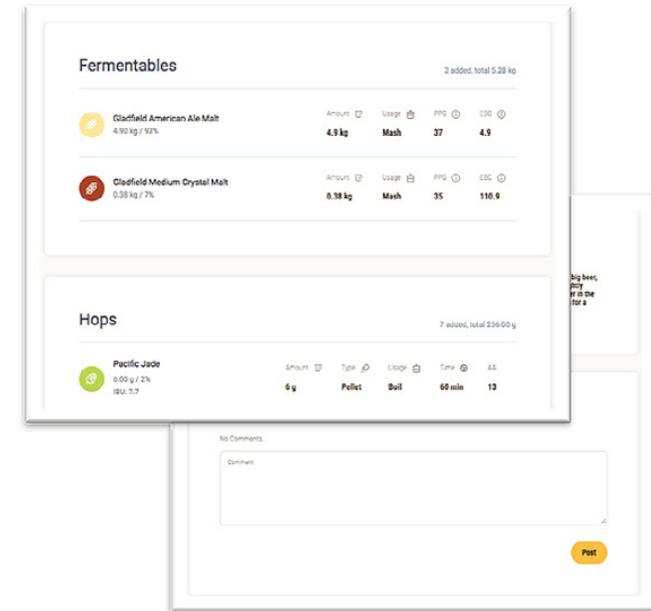
2. Once a public recipe is clicked on in the search window, you will be displayed the recipe details page. The first section displays the key stats on the right.

Displayed at the top will be quick buttons to duplicate the recipe, which will add it to your personal library to brew or edit.

Also from this section you can view any public sessions that have brewed the recipe, you can compare notes to that of your session.



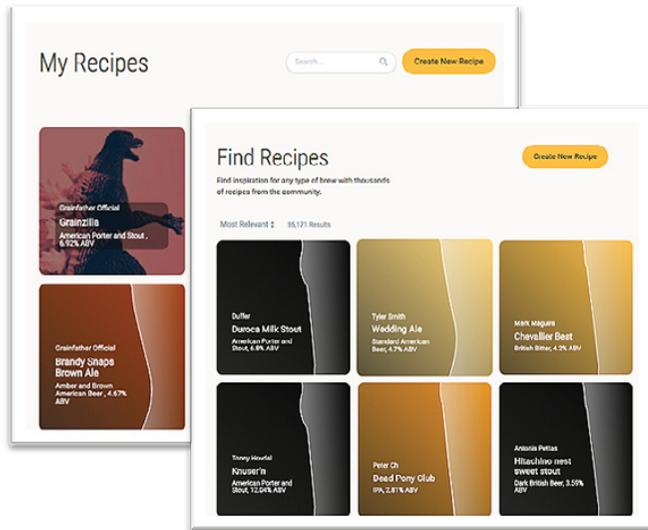
3. If you choose the export function, you may send the recipe via email, or download as either a PDF, XML or as a shopping list of ingredients.



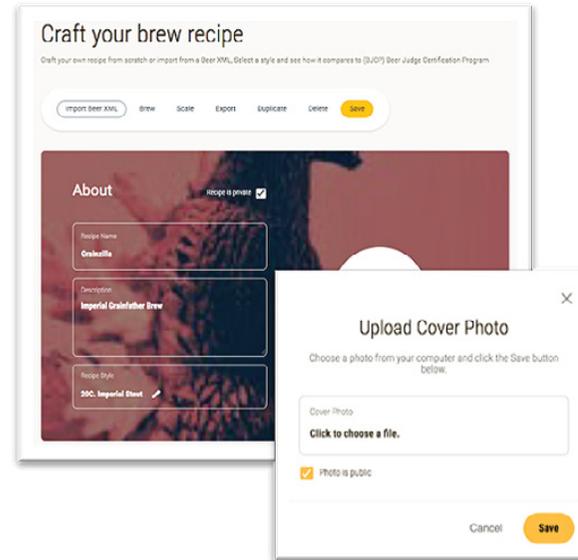
4. The entire recipe details including ingredients and brewing steps will be displayed. Don't forget to post a comment of your experience with the recipe for the owner and other brewers.



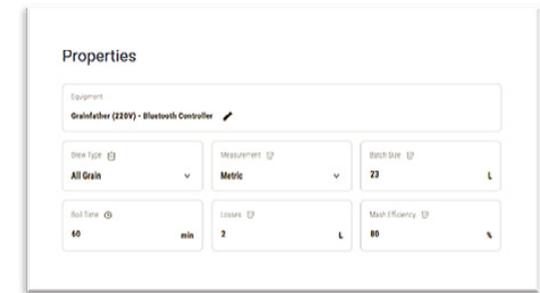
# Creating a recipe - Ingredients Part 1



1. Create a new recipe simply click the 'Create Recipe' button which can be found on either the Find Recipes or My Recipes page.



2. Name and describe your recipe, then select the style that best represents it. Choose whether to make the recipe private or public then add a photo.



3. Review your recipe properties and change your brew type and the units of measurement, either imperial or metric.



# Creating a recipe - Ingredients Part 2

A search interface for fermentables. At the top is a search bar with the placeholder text "Type to Search...". Below the search bar is a section titled "+ Custom". The main area displays a list of fermentables with columns for Name, PPG, and EBC. Each item has a plus icon to its left and a trash icon to its right.

Name	PPG	EBC
2-Row Pale (Malleurop)	37.72	3.3
2-Row - US	37	1.2
6-Row - US	35	3.8
Abbey Malt - DE	33	43.9
Acidulated Malt - DE		

4. Start building your recipe by selecting and adding each fermentable by searching from the list or using the 'plus' icon to add a custom fermentable.

The "Fermentables" configuration screen. At the top right, it shows "2 8000g, total 7.50 kg". The screen is divided into two sections. The first section is for "80%" and shows a fermentable named "Maris Otter Pale - UK" with an amount of "6 kg". Below this, there are fields for "Usage" (set to "Mash"), "PPG" (38), and "EBC" (6.5). The second section is for "20%" and shows a fermentable named "Black Patent Malt - UK" with an amount of "1.5 kg". Below this, there are fields for "Usage" (set to "Mash"), "PPG" (25), and "EBC" (1332.8). At the bottom, there is an "Add Fermentable" button.

5. Key in the amount in weight and adjust the pre-loaded fermentable characteristics to suit your recipe.

Two overlapping configuration screens. The top screen is for "Hops" and shows "1 added, total 63.00 g". It features a fermentable named "Northdown" with an amount of "63 g" and a type of "Pellet". Below this, there are fields for "Usage" (set to "Boil"), "Time", and "AA". At the bottom, there is an "Add Hop" button. The bottom screen is for "Yeast" and shows "1 added". It features a yeast named "White Labs London Ale WLP013" with an amount of "1 packets" and an attenuation of "71". Below this, there are fields for "Unit" (set to "packets") and "Attenuation". At the bottom, there is an "Add Yeast" button.

6. Next select your hops and yeast then adjust the pre-loaded characteristics to suit your recipe. Lastly for ingredients, add any extras such as Deltafloc or Irish Moss and select the stage and time remaining for when the extra gets added.



# Creating a recipe - Process/Steps

Import mash profile

Name	Temp °C	Time
Mash Step 1	60 °C	90 min
Mash Step 2	70 °C	15 min
Mash Step 3	75 °C	20 min

Add Mash Step

Import fermentation profile

Name	Temp °C	Time
Fermentation Step 1	18 °C	21 days

Add Fermentation Step

Notes

Transfer to carboy and age in a dark room for 3 - 6 weeks further after primary fermentation.

Mash Steps Import

Type to Search...

APA mash profile  
2 steps Import

Show Steps >

1. Start by adding your mash steps. You may add multiple mash steps; it is a good idea to uniquely name these to avoid confusion later during your brew. Add the temperature for each step and how long that step will last in minutes.

2. Next add your fermentation steps. Again it is a good idea to name these, especially for monitoring fermentation later. Add the temperature and how long each step in the fermentation schedule will last in days. Lastly add any notes for yourself.

## TIP - Import profiles

Tap the 'import' button to use a pre-configured mash or fermentation profile that you have designed previously. Select it from the list of profiles available. See profiles section for more details.



Let's plan  
and start  
a brew  
session

Start a new brew session  
from the planning stage

## My Brew Sessions

Planning 2 added [Add New](#)

Ready to brew? Start brewing your planned sessions on our [Apple](#) and [Android](#) apps.

**Grainzilla**

Equipment: Grainfather (220V) - Bluetooth Controller  
Status: Planning  
Brewed: 9th Aug 2019

**Easy Drop**

Equipment: Grainfather (220V) - Bluetooth Controller  
Status: Planning  
Brewed: 9th Jul 2019

Fermenting 1 added [Add New](#)

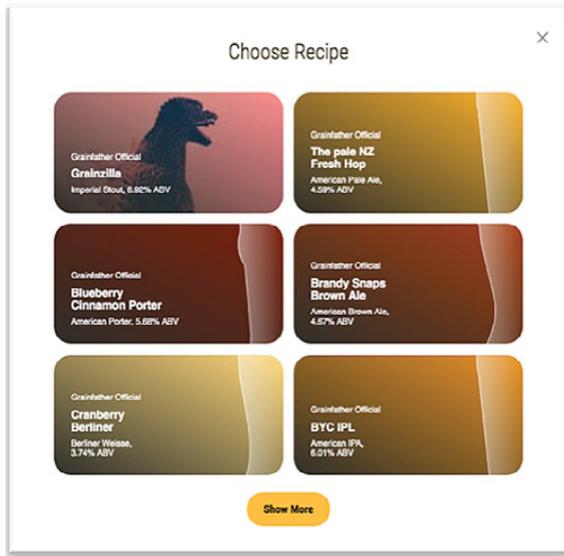
**Chur!**

Equipment: Grainfather (220V) - Bluetooth Controller  
Status: Fermentation  
Brewed: 9th Jul 2019

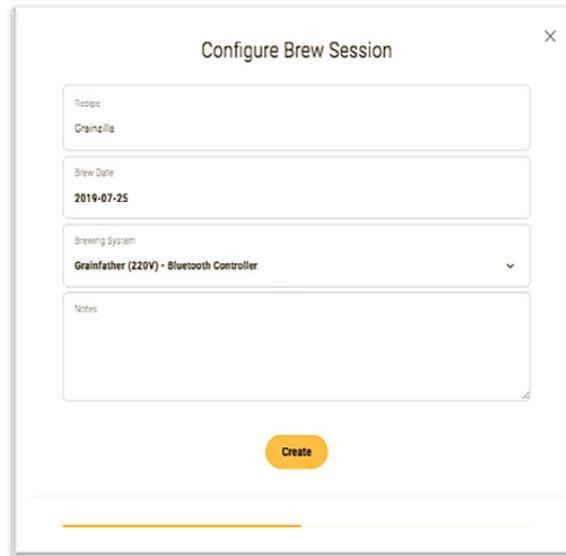
Current list of brew  
sessions with scheduled  
date or date completed



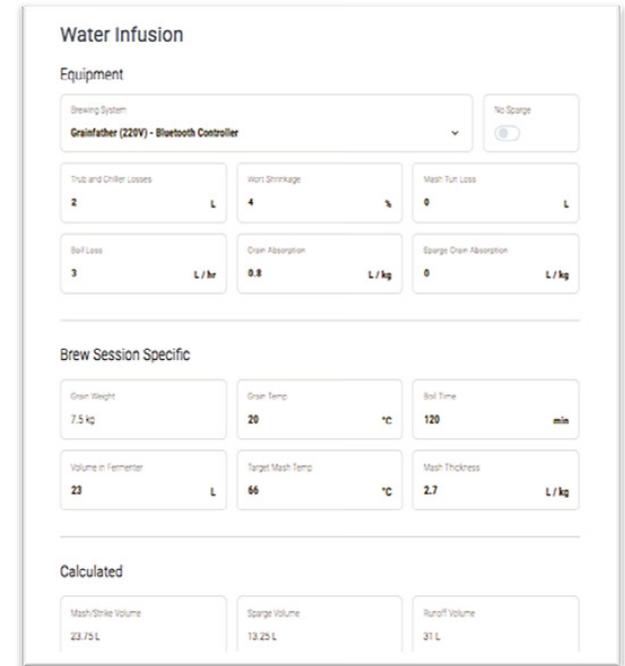
# Brew Session - Planning



1. Start by selecting the recipe you will be brewing. You can also choose to start a new recipe here, see the recipe creation section for more details on how to do this. Then choose the date you plan to brew and set the visibility of the session to public or private.



2. Now select the equipment you will be brewing with. Choose equipment you have previously set up or for new equipment view the section in this guide for more details. Click 'Create' to begin crafting the session.



3. The values will be pre-loaded as per your recipe and equipment, but you can modify the values before you save your planning session.



# Brew Session - Brew Day

**Mash / Boil**

**Mash**

Mash pH  PH

Mash Start Temp  °C

Mash End Temp  °C

Mash Time  min

**Boil**

Pre-Boil Gravity

Boil Volume

Boil Time

Post-Boil Volume  L

**Fermentation**

**Brew Session Specific**

Volume in Fermentor  L

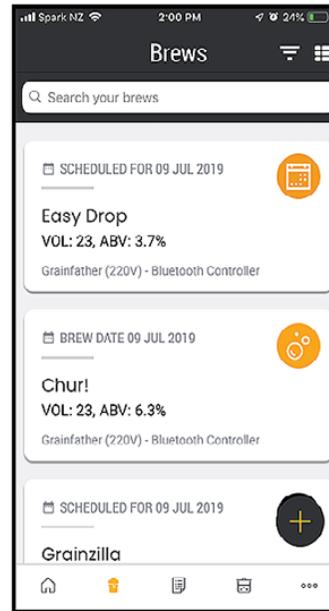
Original Gravity

Final Gravity

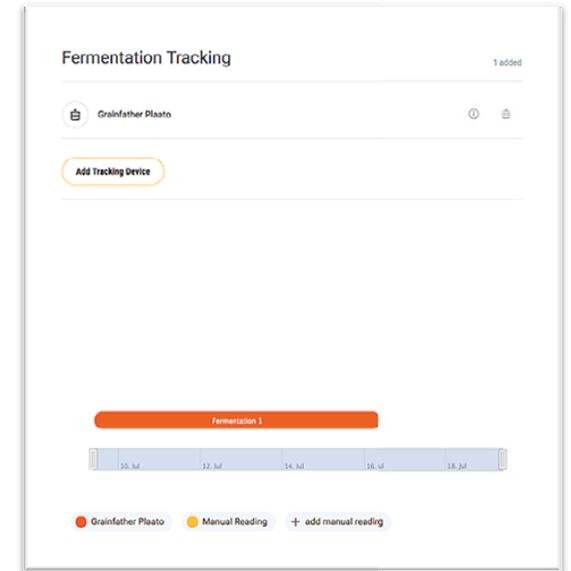
**Calculated**

ABV

1. Save your planning session if you have not already and look forward to the brew day ahead. The 'mash' and 'boil' sections are for notes taken during your brew day. These will be populated as you add them during the brew session.



2. When it's time for your brew day, we recommend switching to the Grainfather Community App to get the most out of your brew day. It will sync all the information from the brew session you have just created and the notes you take down on the app while brewing will also be synced back to your account and the brew session details page.



3. By the time you come to the fermentation stage of your brew session, if you have not added a fermentation tracking device to the session you can do so now by selecting the 'Add Device' button. If you have not previously set a device up, you can also do so now. Review the 'Equipment Set Up' section of this guide for more details.

