

# THE GLUTEN FREE BREWER'S RECIPE COLLECTION

## BLOOD ORANGE IPA – All Grain

Batch size – 20 litre    Start of boil volume – 28 litres approx\*

Original Gravity	Final Gravity	Alcohol content	Bitterness	Colour
1.064	1.015*	6.5%*	63*	7 SRM

### INGREDIENTS:

3.6kg of Pale Millet Malt  
1.25kg of Biscuit Rice Malt  
1.5kg of Vienna Millet Malt  
400g of Honey  
1kg of Blood oranges (Juice and zest only)  
20g of Centennial hop pellets (8%AA)  
40g of Ella hop pellets (13.3%AA)  
40g of Citra hop pellets (13.5%AA)  
40g of Galaxy hop pellets (14.3%AA)  
4ml of liquid alpha amylase or 7g of dry alpha amylase

### YEAST SUGGESTIONS:

Lallemands BRY-97  
Safale US-05  
Mangrove Jacks M44 US Westcoast  
Use a minimum of two packets

### FERMENTATION TEMP. SUGGESTION:

18-20 degrees Celsius

### BREW IN A BAG PROCEDURE:

In your kettle bring 20 litres of water to the boil. Turn off the heat source, place brew bag in the pot and then add all of the crushed malt. Stir all the grains continuously for 5 mins or until all grains are gelatinised. The grain bed will thicken to a thick porridge consistency.

Once this is complete add enough cool water to bring the mash temperature to 66°C (or the enzyme manufacturer's optimal conversion temperature) and the kettle volume to 28 litres\*.

Add your enzymes and stir them in thoroughly. Maintain mash temperature for 120 minutes stirring occasionally. Once you have achieved adequate conversion of starches to sugars, remove brewing bag and grains and strain out the wort into your kettle (and yes you can give a gentle squeeze to remove a little more wort).

In your kettle mix wort and honey and bring to the boil. At this stage add any brewing salts that you may like to use and 20g of Centennial hop pellets.

45 minutes into the boil add any kettle finings and yeast nutrient.

After a 60 minute boil turn off your heat source and add 20g each of Ella, Citra & Galaxy hop pellets. Stir (whirlpool) the kettle continuously for 20 minutes.

Once this is done cool the wort to 18°C or your desired fermentation temperature if it is different.

Transfer beer into a sterile fermenter, straining out the hop debris with your cleaned and sterilised brew bag, then aerate and pitch yeast.

Once fermentation has finished, dry hop the beer with 20g each of Ella, Citra and Galaxy hop pellets for 3 days.

Bottle or keg beer when the final gravity is consistent over 2 days.

\* These figures are dependent on various conditions and boil off rates and may vary.