# THE GLUTEN FREE BREWER'S RECIPE COLLECTION

## CENTENNIAL IPA - All Grain

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

Original Gravity	Final Gravity	Alcohol content	Bitterness	Colour
1.072	1.018*	7.1%*	64 IBU*	15 SRM

#### **INGREDIENTS:**

4.8kg of Pale Millet Malt

1.5kg of Goldfinch Millet Malt

600g of Crystal Rice Malt

1.25kg of Biscuit Rice Malt

200g of Cane Sugar

150g of Centennial hop pellets (10%AA)

4ml of liquid alpha amylase or 8g 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:**

Bring 20 litres of water to the boil. Turn off the heat source, place brew bag in your kettle 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 done add enough cool water to bring the mash temperature to 66°C (or enzyme manufacturers optimal conversion temperature) and the kettle volume to 28 litres.

Add your enzymes and stir them in thoroughly. Maintain your 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).

Bring your kettle to the boil. At this stage add any brewing salts that you may like to use, the cane sugar and 30g of Centennial hop pellets.

45 minutes into the boil add 30g of Centennial hop pellets and any kettle finings and yeast nutrient.

55 minutes into the boil add 30g of Centennial hop pellets.

After a 60 minute boil turn off your heat source and 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 60g of Centennial hop pellets for 5 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.