Home Roasting Pale Malt to Pale Amber, Amber, and Brown Malt

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the material is reproduced from the appendices of the "Durden Park Old British Beers Book".

Some ingredients needed to make OLD BEERS might not readily be available, in particular pale amber, amber and brown malts. All three can be made by roasting pale malt in a normal domestic oven as described below. Carapils with a colour number of 25 can be used as a substitute for pale amber. However, carapils has little diastatic activity and, as with any low activity grain, eg. roast barley, brown malt, amber malt, it should not exceed 45% of the total grist, the balance being pale malt. Carapils, however, might only be available by bulk purchase direct from maltsters.

Roasting Method

Line a large baking tin with aluminium foil, and pour in pale malt to a depth of 12 mm (1/2 inch). Place in the oven (preferably fan- stirred) at 100 C (230 F) for 45 minutes to dry out the malt, then raise the temperature to 150 C (300 F). After a further 20 minutes remove 6 or 7 corns from the tray, slice across the centre with a sharp knife and compare the colour of the starchy centre with that of a few pale malt corns. The pale malt is almost pure white; for pale amber the colour should be the palest buff, just noticeably different from the pale malt. Continue heating until this colour is obtained, usually about 30 minutes.

For amber malt, continue heating until the cut section is distinctly light buff, usually 45 to 50 minutes. If brown malt is needed, raise the temperature at this point to 175 C (350 F) and wait until the cut cross-section is a full buff, i.e. about the colour of the paler types of brown wrapping paper. When the correct colour has been reached, remove the tray from the oven, allow to cool and store the roast grain in an air-tight screw-top jar (large kilner jars are ideal). If used soon after production, the flavour imparted by home- roasted grain is superior to bought grain.

The roasting times given above are intended only as a guide to producing the wanted roast grain Practical tests on the oven available will enable home-brewers to adjust the time and temperature to produce the colour needed.

Crystal malt, which is usually available, has about the same colour potential as brown malt but a more caramel-like flavour.

The following has not made it into the the appendix yet but .... For those who are interested in retaining

diastatic activity, subsequent (informed) experiments have shown that a longer time drying the grain at a lower temperature helps protect the enzymes. The following will produce a diastatic Pale Amber.

Set the oven at 70-75 C (160-170 F) and put in the tray of grain (the grain bed can be a little deeper - up to 1.5 inches, say) and leave for 2 hours to dry out the grain. Raise the temperature to 88-94 C (190-200 F) for 30 mins then to 110-115 C (230-240 F) for a further 30 mins. Check the colour as above. If insufficient colour, then check at 15 min intervals. If after 1 hour at this temperature, colour has not been achieved, raise to 120-125 C (250-260 F) and continue to check at 15 min intervals. The resultant Pale Amber should be able to mash itself.

For Amber malt, after the grain has spent 1 hour at 110-115 C (230-240 F) raise the temperature to 127-132 C (260-270 F) and check colour every 15 mins.

*** And note: these diastatic darker grains will be more acidic than normal pale malt and if large proportions are used in a mash you might have to make an allowance in you water treatment.

I hope that helps. Good mashing.

Geoff