TORRIFYING WHEAT

Defining Torrefaction

The term *torrify* means "to toast". Torrefaction is the slow heating of whole grains to gently liquefy, expand, then cause the endosperm to burst without overly cooking the kernel. The result is a gently toasted whole grain that has more of its starchy surfaces exposed for conversion. It also modifies the kernel, (Maillard rather than malting), just enough to make it more readily crushed.

Why Torrify?

Why torrify when hot-rolled wheat seems just as effective? Actually, rolled barley or flaked barley has the drawback of gumming up mash tuns if a beta glucanase rest is skipped. Torrified wheat won't gum up your tun as readily. Also, torrified wheat can add a very nice subtle sweet bready flavor to the brew due to the Maillard compounds produced.

Method, Temperature, and Timing

For home torrefaction the most common and accessible method is an insulated double-lined baking sheet lined with parchment paper. This will provide *relatively* even heat distribution. Temperatures will vary for wheat types. Most white wheat varieties do well in a pre-heated oven temperature of 365-370F at 9-10 minutes. We use Prairie Golden Wheat. It is non-GMO and available in organic. It is also a premium wheat grown here in the US that adds a fantastic bready sweetness to Belgian Ales.

Other Methods of Heating

Popcorn poppers have been suggested for home torrefaction. We have found that they work but it takes a few wasted batches before you can time the perfect roast. Coffee roasters have also been used. These are probably the most ideal but also a little more expensive. They heat accurately on a timer and allow viewing of the grains so you can see when the tasting is complete.

Sample Torrefaction

1.   Preheat oven to 370F

2. Line the baking sheet with Parchment
3. Measure out 1 lb of whole wheat kernels and spread them single-kernel thin
4. Bake for 10 minutes and let air cool
5. Crush and brew