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BARLEY WITH REDUCED LIPOXYGENASE ACTIVITY AND BEVERAGE PREPARED THEREFROM

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Abstract not available for EP2384110 (A2)

Abstract of corresponding document: WO2010075860 (A2)

According to the invention, there is provided barley with total loss of functional lipoxygenase (LOX)-1 and LOX-2 enzymes, and plant products produced thereof, such as malt manufactured by using barley kernels defective in the synthesis of the fatty acid-dioxygenating enzymes LOX-1 and LOX-2. Said enzymes account for the principal activities related to dioxygenation of linoleic acid into 9- and 13-hydroperoxy octadecadienoic acid, respectively. 9-Hydroperoxy octadecadienoic acid represents a LOX pathway metabolite, which - through further enzymatic or spontaneous reactions - may lead to the appearance of trans-2-nonenal (T2N). The invention enables brewers to produce a beer having insignificant levels of stale, T2N-specific off-flavors, even after prolonged storage of the beverage.