

<<啤酒大麦品质的遗传和改良>>

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### 内容概要

Genetics and Improvement of Barley Malt Quality presents up-to-date developments in barley production and breeding . The book is divided into nine chapters , including barley production and consumption , germplasm and utilization , chemical composition , protein and protein components , carbohydrates and sugars , starch degrading enzymes , endosperm cell walls and malting quality , genomics and malting quality improvement , and marker-assisted selection for malting quality The information will be especially useful to barley breeders , malsters , brewers , biochemists , barley quality specialists , molecular geneticists , and biotechnologists . This book may also serve as reference text for post-graduate students and barley researchers . The authors for each chapter are the experts and frontier researchers in the specific areas .

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作者简介

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### 章节摘录

插图：Barley has many economic uses today. Barley is produced primarily as animal feed. For example, over half of the barley is used for livestock feed in the United States. Barley as feed has the same nutritive value as corn. Barley is high in carbohydrates, with moderate amounts of protein, calcium and phosphorus. It also has small amounts of vitamin B. The entire barley kernel is used as feed after it has been steam rolled or gone through a grinding process. By products from the brewing process and malt sprouts are also used in livestock feed. The two-rowed barley is most often used for animal feed because it produces higher weight and superior kernel production. Barley is also used in the production of beer and some wines. About 25% of the cultivated barley in the United States is used for malting, with about 80% used in beer production, 14% used in distilled alcohol production, and 6% used for malt syrup, malted milk, and breakfast foods. A small amount of the barley is used for human food in the form of pearl barley or flour for porridge. Sometimes, barley is grown as a hay crop in some areas. Only the smooth varieties and awnless varieties are used in hay production. Winter barley also can be used for hay if pasteurized before the stems start to elongate. The amount of barley used for ethanol has been increased significantly in the last decade, especially in some EU countries ( [www.biofuelreview.com](http://www.biofuelreview.com) ).

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