

Choice of brewing barley

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The appropriateness of barley for a brewing production is determined by a number of signs that indicate its quality. First barley is estimated by its external signs – colour, smell, infection by vermin. Then the chemical composition of barley is checked - humidity, maintenance of protein, etc. Brewing barley must possess technological (malt) properties — easily to be processed on malt, give the high exit of beer from unit of raw material and provide the good value of the prepared beer.

Colour. Barley must be yellow. The greenish colour of shell indicates unripe barley. Such single grains can meet at ordinary barley. Grain of dark-yellow colour with black or brown tags and spots was wetted slightly during the harvest or storage, that is why it can lose germination or be staggered by microorganisms, and the malt of low quality will turn out from it.

Smell. A smell of barley must be fresh, reminding the smell of straw, without the tints of musty and pleocytosis smell. For determination of smell grain is taken in a hand and warm, whereupon slightly grind between hands.

Form. A form of grain is an important sign. Almost all sorts of grains have elliptic or oval form, with the rounded lateral edges. At unfavorable weather grains will be extended.

Cleanness. It characterizes absence of admixtures of other cereals, seed of weeds, damaged grains and vermin (tick, weevil).

Nature. It characterizes properties of barley though, but in the estimation of quality of grain does not play a substantial role. Mass of 1000 grains (absolute mass) is an additional index, characterizing quality of grain.

Humidity of barley. The table of contents of moisture in a barley must make 10—15,5%. More dry grain can lose a germination, and more moist warms up at storage, breathes vigorously, that results in the increase of loss of extractive matters.

Table of contents of albumin. Barley with maintenance of albumin more than 12% is hard to process, because it warm up and there is a two-bit of extractive matters in it. Barley, containing less than 9% albumin gives beer with weak suds.

The basic requirements to the brewing barley according to the State Standard 5060—67 «Barley for brewing» are indicated in a table 1.

Table 1

Indexes of quality	Norms for classes	
	1	2
smell	Peculiar to normal barley without extraneous smell	
State	Not warming up, in the normal state	
Humidity %, no more than	15,0	15,5
Admixture content, %, no more ruderal	1,0	2,0
including harmful	0,2	0.2
grain-growing	3,0	5,0
Largeness, remain of grain in tails from a sieve with openings measuring 2,5kh X 20 mm, %, no less	80,0	60,0
Maintenance of shallow grain is a passage-way through a sieve with openings measuring 2,2x20 mm, %, no more	5,0	7,0
Ability of germination on a fifth day, %, no less	5,0	7,0
Ability of germination on a fifth day, %, no less	95,0	90,0
Infection by vermin	Impossible	

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2. <http://www.comodity.ru/beer/barley/9.html>