Malting quality of winter and spring barley varieties

Gordana Šimić, Alojzije Lalić, Daniela Horvat, Josip Kovačević, Ivan Abičić

Agricultural Institute Osijek, Južno predgrađe 17, Osijek, Croatia (gordana.simic@poljinos.hr)

Summary

The aim of this study was to estimate the malting quality of barley varieties of different seasonal type. Field trials included six cultivars grown in locations of Osijek and Nova Gradiška for three successive years. Zlatko, Barun and Vanessa are two-rowed winter type barley varieties and Fran, Matej and Scarlett are spring barley varieties. The results of malt extract content showed significant differences among winter and spring varieties under different growing conditions. In general spring barley varieties had a higher content of malt extract, lower difference between the extract contents produced from fine and coarse grinded malt, lower wort viscosity, higher level of β-glucanase reaction and higher friability in comparison to winter varieties. However, the results from locations showed no evidence which would point out the statistically significant difference in terms of extract content, together with malt degradation parameters.

Key words: barley, malting quality, malt extract, wort viscosity