

BREWING QUALITY INDICATORS OF BARLEY, NADEZHNY VARIETY, DEPENDING ON NUTRITIONAL CONDITIONS

V. I. Trukhachev, S. L. Belopukhov, R. R. Islamgulova, I. I. Seregina, N. N. Novikov, I. I. Dmitrevskaya
Russian State Agrarian University – Moscow Agricultural Academy named after K.A. Timiryazev
49, Timiryazevskaya St., Moscow, 127550; E-mail: seregina.i@inbox.ru

The influence of different levels of mineral nutrition on the yield and brewing quality indicators of barley of the Nadezhny variety was studied in field conditions at the experimental site of the Department of Agronomic, Biological Chemistry and Radiology of the RSAU-Moscow Agricultural Academy named after K. A. Timiryazev. The use of balanced rates of nitrogen, phosphorus and potassium when growing barley allows to get the maximum possible grain yield with the optimal protein content and other quality indicators that meet the requirements of the brewing industry.

It was found that the most optimal conditions for mineral nutrition were formed in the treatments $N_{60}P_{60}K_{60}$ and $N_{60}P_{60}K_{90}$. Under the prevailing conditions, a sufficiently high grain yield (291 g m^{-2} and 324 g m^{-2}) with optimal quality indicators was obtained. These indicators allow using the obtained grain for brewing purposes. The grain in these treatments was characterized by the most optimal indicators of hulliness, evenness, energy and germination ability, as well as protein content.

Key words: malting barley, mineral nutrition, barley yield.