

MONITORING OF STARCH CONTENT IN GRAIN OF OAT VARIETIES FOR THE CONDITIONS OF THE OMSK REGION

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Oats are the one of the leading economically profitable grain-fodder crops, the use of which is very wide. Recently, the popularity of oat grain processing products for food purposes has significantly increased due to their high nutrition quality. The purpose of the research was to identify oat varieties that were, in terms of starch content in grain, suitable for the conditions of the southern forest-steppe of the Omsk region. The objects of research were 12 varieties of spring oats selected by the Omsk Agrarian Scientific Center and other scientific centers, recommended for cultivation in the region. The starch content in the grain was determined by the polarimetric method. The following parameters of the adaptability were calculated: Hom – index of homeostasis; ПУСС – index of the variety stability; d – index of grain starch content range; O – index of ecological plasticity; И – index of intensity; St² – index of the trait relative stability; V – coefficient of variation. The most adaptive varieties for the conditions of the southern forest-steppe of Western Siberia were allocated on the basis of the sum of ranks according to the listed methods. The most adaptive in terms of starch content in grain for the conditions of the southern forest-steppe of the Omsk region are the following varieties of oats that have gained the minimum amount of ranks according to the methods listed above: Levsha, Progress, Irtysh 23 (the sum of ranks = 20...26). These varieties will form an increased starch content in the grain under unfavorable growing conditions.

Keywords: oats, starch, adaptability, rank.

