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EVALUATION OF RED CLOVER SAMPLES ON THE BASIS OF BREEDING INDICES

The main task of meadow clover breeding is creating of highly productive hay-pasture type varieties with increased winter-resistance, resistance to diseases and pests, high feed quality indicators and constant seed productivity.

The success of breeding this culture is largely determined by the availability of initial material and effective methods for the identification and selection of genotypes for phenotypic traits. The search for simple and reliable method for evaluating a breeding material with subsequent selection is important for breeding. One of such methods is the study of material on for breeding indices.

For meadow clover, as for other agricultural crops, it is important to identify those morphological features that ensure the formation of a rational ecotype using breeding methods.

The most common in scientific and breeding studies is attraction index, which shows the percentage ratio of the inflorescences mass to the mass of the stem. The three-year average of the value of the attraction index in the varieties of meadow clover was 0,29 and ranged from 0,23 (Truskavchanka) to 0,38 (selection from the wild-growing population № 179). The variability of the considered index was average (15,4 %).

The microdistribution index is associated with the green mass from plant and the number of stems. It was 10,83, with a coefficient of variation of 11,9 %. The highest indicator of microdistribution index was in the Truskavchanka variety – 13,8, the lowest in Vyliai – 8,1.

To the culture of the red clover, we applied a foliage index, which was on average over the years in specimens of the early-maturing group 0,44. The foliage index characterized by an average variability index of 12,4 %.

The average intensity index was 0,09 and coefficient of variation of this index was 15,6 %.

We also applied to meadow clover and of intensity index of daily growth, which is associated with the plant height for the interphase period and the number of days in the interphase period. Its average figure was 0,99,

it was the highest in variety-samples № 01914 (individual selection from № 631) and № 01915 (mass selection from № 792) – 1,06, the lowest – in № 10684 – 0,93. This index was characterized by a low volatility index – 2,02 %.

A correlation analysis was performed for establishing the dependencies between productivity and breeding indices.

The foliage and intensity indices are most closely correlated with productivity and can be used as selection criteria.