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CHEMICAL COMPOSITION OF GRAIN OF OAT NAKED SAMPLES

An aim of our research was to definite chemical composition of grain of oat naked samples, to establish statistical parameters and correlative connections of grain quality traits and to conduct cluster analysis of genetic divergetion for these traits.

31 variety-samples of different ecology-geographical origin that received from National Centre for Plant Genetic Resources of Ukraine and 7 breeding naked lines created in Institute of Agriculture of Carpathian Region of NAAS were used in study of oat naked genotypes

The contents of basic nourishing substances in grain (common nitrogen, proteic nitrogen, raw oil, fiber, raw ash) were defined on avtomatic analyzer "Infrapid".

Naked samples of oat are characterized with greater contents of raw protein, protein, oil in grain and with less level of fiber. For comparison of registered varieties of hull type Chernihivsky 27 and naked Avhol was established that the last have advantage for contents of raw protein on 4,08 %, protein – 3,6 %, oil – 2,03 %, but for content of fiber the hull variety surpassed the naked on 7,05 %

For contents of raw protein 6 samples exceeded, namely, 17,0 %, namely, IZT 00422 (17,94), Sibirsky holozerny (17,15), Chernihivsky 27 / AC Lotta (17,17), Hosha (17,07), Levsha (17,05 %). The highest contents of protein was fixed in grain of sample IZT 00422 (16,22 %).

Oat naked samples also characterized with high contents of oil. In average for three years 10 samples have oil more than six percentages, but the highest contents was fixed in samples Levsha (6,56), Chernihivsky 27 / AC Lotta (6,34), AC Lotta and Terra (on 6,31 %).

There are enough significant swings of variation for contents of raw protein (5,89 %), protein (3,69 %), oil (1,49 %) and fiber (2,03 %), that testified about significant genetic differences for these traits between separate samples.

Dendogram assembled for results of samples clusterization for chemical contents indicated that at first iteration AC Gwen (V-21) and AC Ernie (V-17) were separated for similarity of proofs, but at next iterations to them added AC Baton (V-4) and AC Hill (V-20). These samples together

with Vandrounik (V-10), Viatsky (V-25), Skarb of Ukraine (V-3) and Avhol (V-2) were composed the first cluster for similarity proofs of grain chemical contents.