

GRAIN QUALITY: TARGET OF LITHUANIAN WINTER WHEAT BREEDING PROGRAM

The winter wheat is the most important crop for Lithuanian farmers. Annually it occupied 35-40 % from total area of cereals. The winter wheat breeding program of the Institute of Agriculture of Lithuanian Research Center for Agriculture and Forestry has been renovated in 1990. The breeding program was divided in to the following groups according to their ultimate targets to develop: early ripening varieties with a high protein content and very strong gluten; early-medium ripening varieties with high bread-making quality; medium ripening, high yielding varieties, with satisfied bread-making quality; late ripening high yielding varieties for not bread-making purposes. During the period 1990-2015 have been developed 14 varieties. The released and cultivated variety *Alma* is of extremely high, *Ada*, *Milda*, *Kena*, *Taurus*, *Herkus* high, *Kovas*, *Vikaras*, *Sedula*, satisfactory bread-making quality. The variety *Gaja* is not for bread-making purposes. All varieties are characterized of high resistance to pre-harvest sprouting, resistance to plant diseases. The program included biotechnological and conventional breeding methods.

Table

Grain quality parameters of recently developed varieties

Variety	Protein content, %	Sedimentation value, ml	Falling number, s	Asch content, %	Grain yield, T×ha ⁻¹
Ada	13.9	62	440	1.67	9.8
Kovas DS	12.5	42	377	1.67	10.8
Vikaras DS	12.7	45	425	1.79	10.2
Herkus DS	13.9	63	358	1.81	9.4
Sedula DS	12.7	46	380	1.61	8.8
Gaja DS	13.3	31	345	1.68	10.6
Kena DS	14.5	70	445	1.64	8.6