

Winter triticale NAZARET

Registered: Slovak Republic 2005

Breeder's rights: SELGEN, a.s., Prague, Czech Republic

Breeder and maintainer: SELGEN, a.s., Plant Breeding Station Úhřetice, Czech Republic

Pedigree: (winter triticale lines LAD 388 ×UH-127) × winter triticale cultivar Presto

Breeding methods: The crossing was carried out in 1992. The individual ear selections started in the F2 generation, followed by selection of ears in F3. Two-row ear progeny was harvested in F4. Preliminary yield tests started in F5 and yield tests continued in next generation. Reselection of ears of best lines started in F6. Resistance to yellow rust, stem rust and brown rust was performed since F4 generation till the end of the breeding process. Tests of resistance to leaf and ear diseases (*Fusarium culmorum* and *Septoria nodorum*) were performed in the generation F5 and F6. The selected line SG-U222 was tested in the Official Trials of Slovak Republic in 2002, 2003, 2004 and it was registered in 2005 as cultivar Nazaret.

Disease resistance: According to classification of UKSUP (2002–2004), the cultivar Nazaret has a good resistant to powdery mildew on leaves (7.8) and a very good resistant (8.1) to this disease on spikes. It has a good level of resistance (7.3) to rust and it is medium resistant (6.1) to leaf rust and on spike (7). The cultivar has a very good resistance to *Fusarium* Head Blight (8.7). It is middle resistant to yellow rust and rust in infections tests. The resistance to *Microdochium nivale* is in a middle level.

Grain quality: higher thousand grain weight (44.8 g), high content of starch (73.89 in dry matter), content of proteins 10.4, content of lysine 5.07 g kg⁻¹ in dry matter.

Grain yield: Grain yield is high and it has a good stability in all growing areas.

Other characters: Cultivar has longer straw length (124 cm) and medium resistance to lodging before harvest (6.9). Heading is medium early, but cultivar is early in maturing. The ear is green, with awns, density of hairiness of neck is strong. The grain is light yellow, coloration with phenol is nil or very nil. Excellent feed quality is evidenced by feed tests with chicken in 2008.

Table 1: The results of feed tests on chicken 2008

International testing on poultry Ustrasice

Crop	Average weight [g] in 35 days			Conversion of feed nutrients [g]	IFE*
	male	female	average		
Average 4 wheat cultivars quality C	2172	1857	2015	1824	303
Winter triticale Nazaret	2233	1888	2061	1787	317

*IFE – Index of fattening effectivity

(IFE = % living × average weight in g × 100 / number days in feeding period × feed consumption per 1 kg live weight in g)

The small sample of grain for research and breeders purposes is possible to get from autor of article.

Ing. Martin Hromadko, Ing. Ludmila Bobková, Ing. Irena Bizova, SELGEN, a.s., Šlechtitelská stanice Úhřetice, 538 32 Úhřetice, Česká republika, tel.: + 420 495 694 063, fax: + 420 692 639, e-mail: uhretice@selgen.cz