

NEW CULTIVARS

Winter triticales KINERIT

Registered: Slovak Republic 2009

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

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

Pedigree: (winter triticales cultivars Modus × Presto) × winter triticales cultivar Presto

Breeding methods: The crossing was carried out in 1994. 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. Since F4 generation was tested frost resistance and from F6 generation sprouting resistance. The selected line SG-U10/94 was tested in the Official Trials of Slovak Republic in 2007, 2008, and it was registered after two years of testing in 2009 as cultivar Kinerit.

Disease resistance: According to classification of UKSUP (2007–2008), the cultivar Kinerit has a medium resistant to powdery mildew on leaves (5.3) and on spikes (7.1). It has a very good level of resistance (8.1) to brown rust and it is medium resistant (6.6) to leaf rust and good resistant to septoria on spike (8). The cultivar has a good resistance to *Fusarium* Head Blight (8.1). The resistance to *Microdochium nivale* is good (9).

Abiotic stressors resistance:

Kinerit has not problems with wintering and shows improving resistance to sprouting.

Sprouting assessment (provocation tests) and falling number

SELGEN Úhřetice

Year		Kinerit	Nazaret	Kolor	Presto	Benetto
Average 2006–2009	1st bonitation	8.0	6.5	7.5	6.7	7.3
	2nd bonitation	6.5	4.5	6.5	4.8	6.0
	Average	7.3	5.4	7.0	5.8	6.6
	FN (sec)	106	64	62	62	66

9 – the best resistance

1 – the worst resistance

FN (Falling number)

1st bonitation – after 7 days

2nd bonitation – after 14 days

Grain quality: higher thousand grain weight (44.1g), high content of starch 71.2% (in dry matter), medium content of proteins 11.4 g kg⁻¹ in dry matter, content of lysine 3.52 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 (127 cm) and medium resistance to lodging before harvest (5.8). The cultivar is medium early or late in compare with standard Presto. The ear is grey, with awns, density of hairiness of neck is strong. The grain is light yellow, coloration with phenol is medium.

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

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