NEW CULTIVARS

Winter triticale 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 triticale cultivars Modus × Presto) × winter triticale 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

<table>
<thead>
<tr>
<th>Year</th>
<th>Kinerit</th>
<th>Nazaret</th>
<th>Kolor</th>
<th>Presto</th>
<th>Benetto</th>
</tr>
</thead>
<tbody>
<tr>
<td>Average 2006–2009</td>
<td>8.0</td>
<td>6.5</td>
<td>7.5</td>
<td>6.7</td>
<td>7.3</td>
</tr>
<tr>
<td>1st bonitation</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2nd bonitation</td>
<td>6.5</td>
<td>4.5</td>
<td>6.5</td>
<td>4.8</td>
<td>6.0</td>
</tr>
<tr>
<td>FN (sec)</td>
<td>106</td>
<td>64</td>
<td>62</td>
<td>62</td>
<td>66</td>
</tr>
</tbody>
</table>

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.