

Improving sunflower for resistance to *Orobanche* and Sulfonylureas herbicides - Sunflower hybrid PF100

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ABSTRACT

Procera Agrochemicals Romania is a company that has developed a program for sunflower breeding, since 2004. One of the main goals of this improvement program is to obtain sunflower hybrids resistant to broomrape, as a consequence of the well-known fact that Romania has a constantly increasing incidence of soil-areas infested with this parasite.

Sunflower hybrid PF100 is a semi-late hybrid that has genetic resistance to broomrape and is also genetically improved with resistance-genes to Sulfonyl Urea herbicides SURES-1 and SURES-2, for both male and female lines. PF100 has been tested in the Romanian official network of the State Institute for Variety Testing and Registration for the last two years (2006-2008). The results recorded showed that the seed production varied from 2348 kg/ha (Timiș county, 2005) to 4604 (Vaslui county, 2006) and the oil content in seeds was between 47-51%. In 2008, the highest seed yield of this hybrid (3700 kg/ha) was obtained in the tests trials from the demo-plots established at Viziru, Brăila county (one of the most infested county with broomrape).