BROOMRAPE (*OROBANCHE CUMANA* WALLR.) CONTROL BY DEVELOPING GENETIC RESISTANT GENOTYPES IN SUNFLOWER

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Abstract

Sunflower broomrape (*Orobanche cumana* Wallr.) is a parasitic plant which has a significant negative impact on seed yield. The parasite is spread in large areas of Europe, Asia and it has identified recently, in North Africa. Breeding for resistance is regarded as the most effective, feasible and environmentally friendly solution to control sunflower broomrape. However, breeding for resistance is challenging as new races of the parasite have evolved. The use of resistant hybrids of monogenic resistance type, is followed by the appearance of new more virulent races that overcome the existing resistance genes. So, it is necessary to develop sunflower hybrids which can accumulate qualitative and quantitative resistance in a single one, in order to have a durable resistance. Among this, by developing Clearfield Production System in sunflower it could have an important control strategy and complemented the genetic resistance against the parasite.

Key words: sunflower broomrape, genetic control, qualitative resistance, quantitative resistance, herbicides resistance