## DISTRIBUTION AND RACE COMPOSITION OF BROOMRAPE (*OROBANCHE CUMANA* WALLR.) IN BULGARIA DURING 2008 – 2017

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## **Abstract**

Broomrape occurred in Bulgaria with the very introduction of sunflower as a field crop. In order to determine the race composition and distribution of broomrape in the country during the ten years period samples of the parasite were collected in different locations from the main sunflower production regions. The race composition of broomrape was determined under greenhouse conditions by standard method. The broomrape population in Bulgaria includes five races (C, E, F, G and H) according to the results obtained from this investigation. Race C was estimate only one time localized on a very small area. Races E and G were most widely distributed, mainly in northeast Bulgaria. Later on, the serious expands was observe in central south regions in Bulgaria. Race F was reported in beginning of this investigation in north Bulgaria. Very soon, the race disappear. May be the strong breeding pressure and the fast changing varietal structure are reason for this fact. At the beginning broomrape race "H" was distributed in the region of north-east, in the border area with Romania and along the north Black sea coast. The last 4 years this race was estimate in central north Bulgaria and we expect expanding to new regions, and the percentage and rate of attack will increased.

**Keywords:** broomrape, race composition, distribution