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**KRASELA"- THE FIRST BULGARIAN SUNFLOWER HYBRID, RESISTANT
TO BROOMRAPE (RASE H) AND STABLE YIELD POTENTIAL UNDER
LIMITED MOISTURE CONDITIONS**

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ABSTRACT

Plant responses to stress are an increasingly frequent subject of research investigations, especially if the stress factors are biotic and abiotic. The parasite broomrape can reduce sunflower yields to zero levels, and as climate change intensifies, droughts are getting longer, affecting agriculture and human livelihoods. In the breeding programs of DZI – General Toshevo main objective is to create drought-resistant and disease-resistant hybrids sunflower. The aim of this study is to make a complete characterization of the conventional sunflower hybrid "Krasella" and its reaction to the resistance of the parasite *Orobanche cumana* Wallr. (race H) in a particularly dry and middle wet year. Ecological experiments there are in different regions of Bulgaria /four points - Gen. Toshevo, Brashlen, Radnevo and Selanovtsi/ and Ukraine /2 points - Zaporozhye and Kirovograd/. The indicators "seed yield", "oil yield" compared to the relevant standard during the years of testing and the resistance of the hybrid to diseases - mildew, thoma, thomopsis, and the parasite *Orobanche cumana* are observed and traced. Over the years of the study, hybrid Krasela has shown stable yields, even in the particularly dry year – 2020 and the middle wet 2019 years.

Key words: sunflower, biotic and abiotic stress factors, *Orobanche cumana* Wallr.