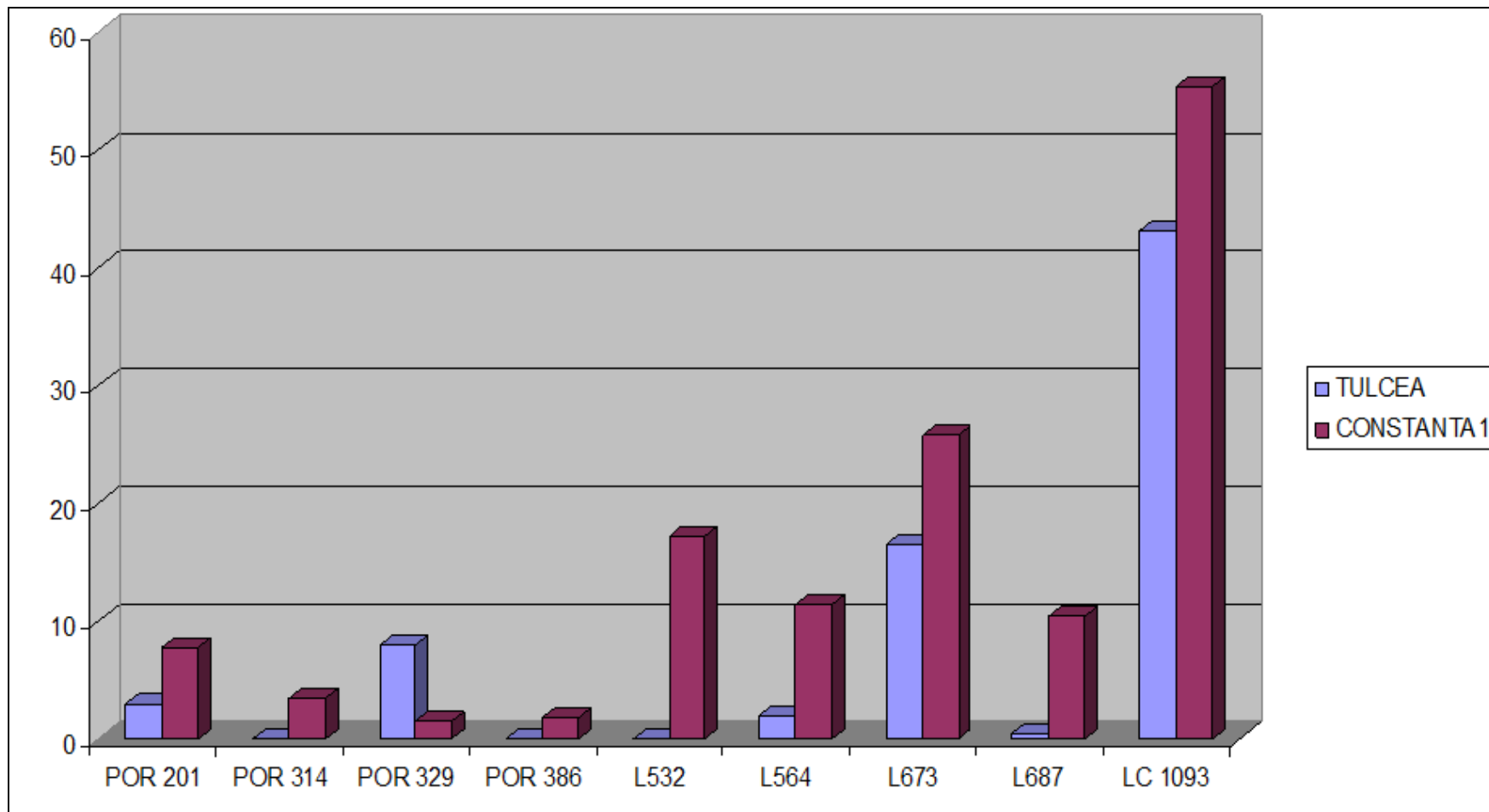


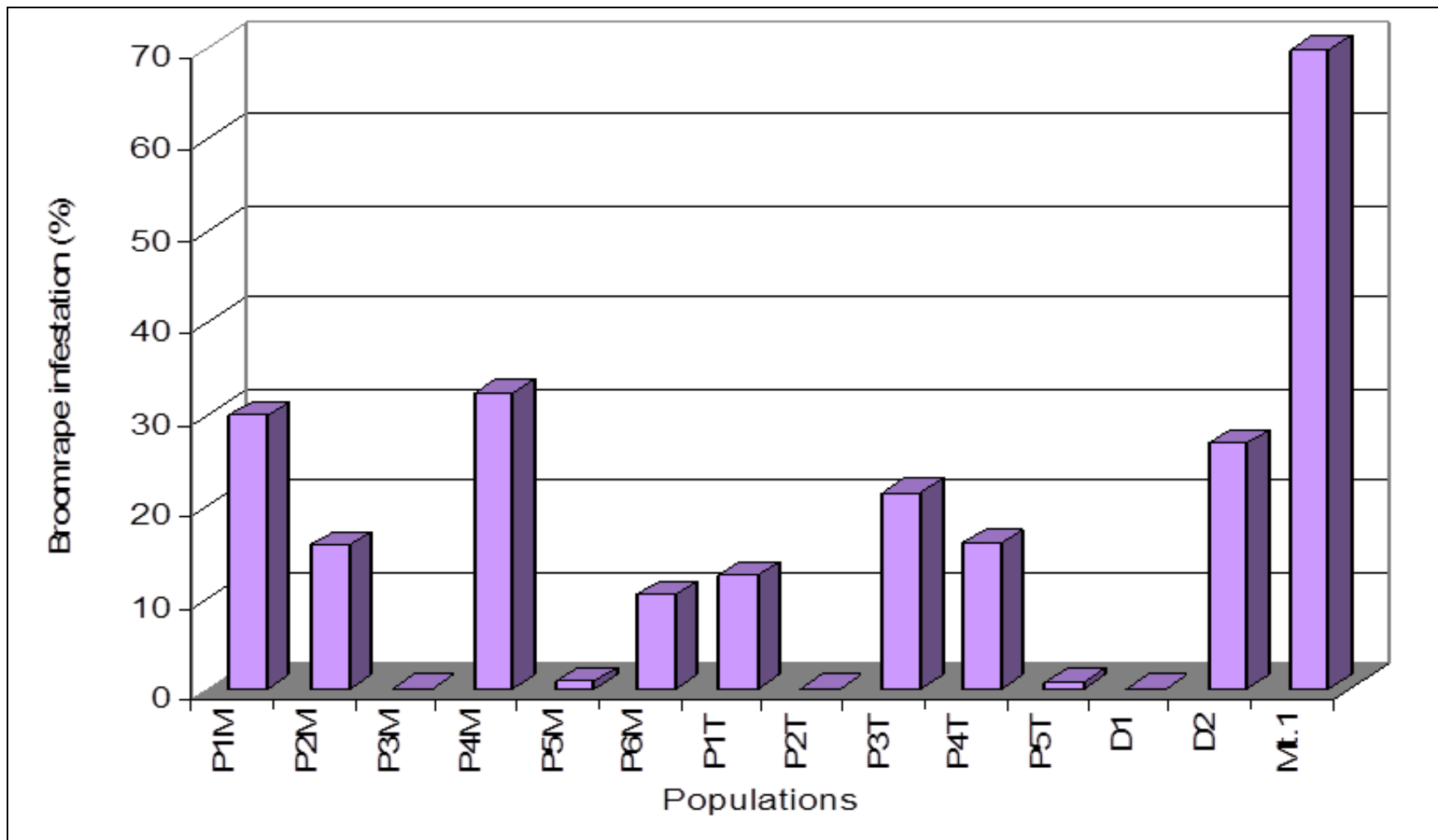
**BROOMRAPE (*Orobanche cumana* Wallr.) CONTROL,  
BY DEVELOPING GENETIC RESISTANT GENOTYPES  
IN SUNFLOWER**

**Prodan Tudorița, Joița-Păcureanu Maria, Rîșnoveanu  
Luxița, Dan Mihaela, Anton Gabriel, Sava Elisabeta, Bran  
Alexandru**

**The 20<sup>th</sup> International Sunflower Conference  
– Novi Sad, Serbia, 20-24 June 2022**



Results regarding the resistance of some sunflower populations obtained from interspecific hybrids, to the broomrape parasite, in the natural infestation conditions, in two areas in Romania



Results regarding the behavior of sunflower populations obtained from interspecific hybrids, to the attack of broomrape parasite, in Brăila area

Genotypes	The reaction to the broomrape races	Location			
		Tulcea - Traian		Constanța - Tari Verde	
		Number of attacked plants	Number of broomrapes/plant	Number of attacked plants	Number of broomrapes/plant
BR - 231	F – A	144 (39)	9	138 (138)	25
BR - 445	F – A	143 (46)	11	117 (117)	13
BR - 478	F – A	145 (52)	8	134 (129)	15
BR - 499	F – A	143 (49)	10	141 (137)	17
LC 6748	F (G) – A	110 (44)	7	112 (107)	15
LC 6896	G – A	144 (54)	9	145 (136)	21
LC 6993	G – A	131 (48)	10	154 (147)	15
HS 758	(G, H) – A	117 (15)	3	121 (17)	2
HS 1129	(G, H) – A	143 (0)	0	123 (14)	5
CH 1	(G, H) – A	119 (0)	0	111 (12)	2
CH 2	(G, H) – A	130 (0)	0	120 (7)	1
Check	Sensitive	144 (67)	8	147 (147)	39

The broomrape attack on different sunflower genotypes, in the natural infestation conditions (Tulcea and Constanța, Romania - average, 2020 year)

# CONCLUSIONS

- The broomrape parasite has become very dangerous for sunflower crop in almost all areas cultivated with sunflower in Europe, Asia, North Africa.
- It is of a great importance to identify sources of resistance to the new races of broomrape.
- For this, the sunflower wild species are very important, they being the best source of genes for resistance.
- Using the resistance hybrids to the parasite, also resistant hybrids to herbicides, the infestation degree decreased, in the last years.





