Seed yield of sunflower hybrids, in year 2024, in Romania

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INTRODUCTION

Sunflower is the most important oil crop in Romania and is cultivated on approximately one million hectares in every year. Romania's agriculture sector faces considerable challenges in year 2024, due to a combination of severe drought and extreme summer heat (source: https://m.efeedlink.com).

In year 2024, in Romania was harvested 1.3 million tones of sunflowers from 13326000 hectares with an average seed yield of 1025 kg/ha (source: EUROSTAT, 2024).

METHODOLOGY

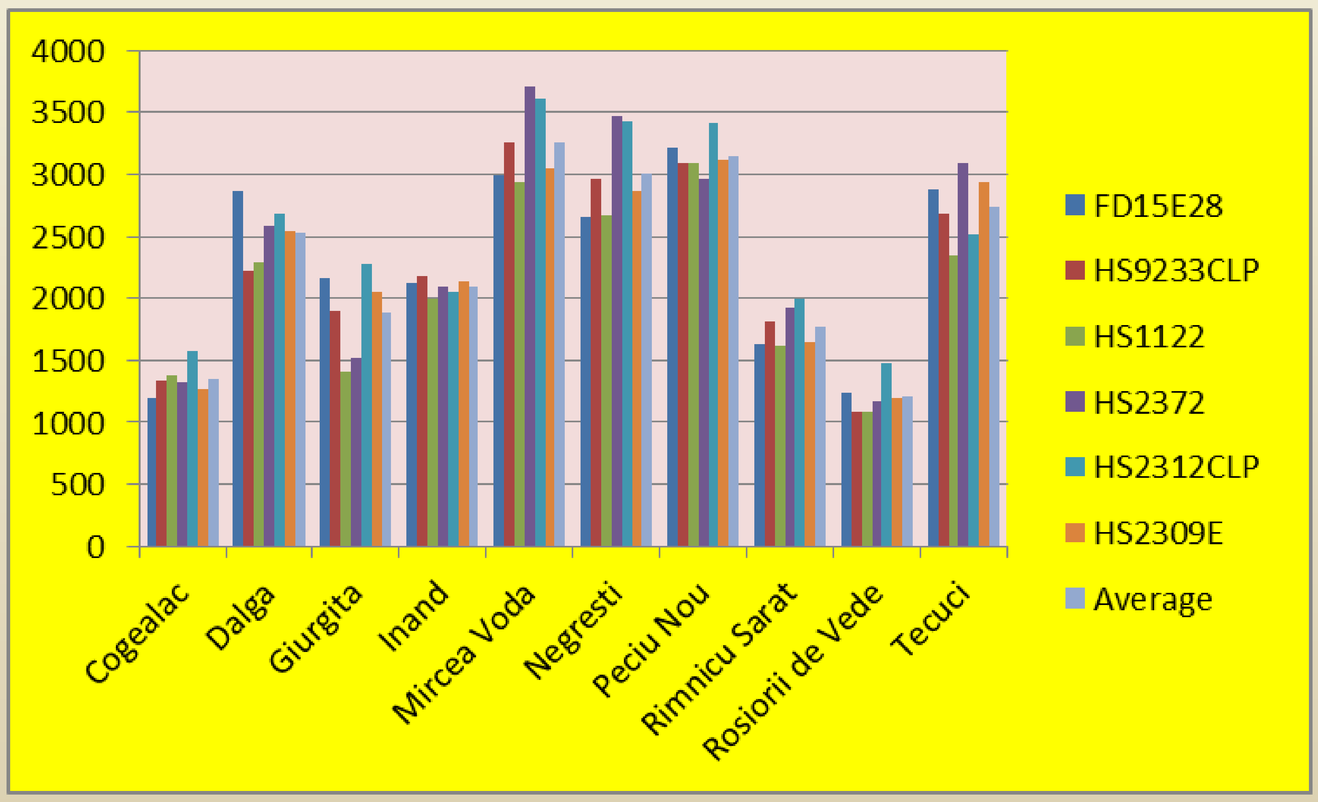
In this paper we present data regarding behavior of two sunflower hybrids in Clearield Plus system, HS9233CLP and HS2312CLP, two sunflower hybrids in Express Sun system FD15E27 and HS2309E, two sunflower hybrids in conventional system HS1122 and HS2372, created at NARDI Fundulea. These six sunflower hybrids were cultivated in year 2024 in ten locations in the test network a State Institute for Variety Testing and Registration.

RESULTS AND DISCUSSION

The lowest seed yield was registered by sunflower hybrid HS9233CLP with 1082 kg/ha, in the south of Romania, in location Rosiorii de Vede, county Teleorman. The higher seed yield was registered by sunflower hybrid HS2372 with 3703 kg/ha, in the south-east of Romania, in location Mircea Voda, county Braila.

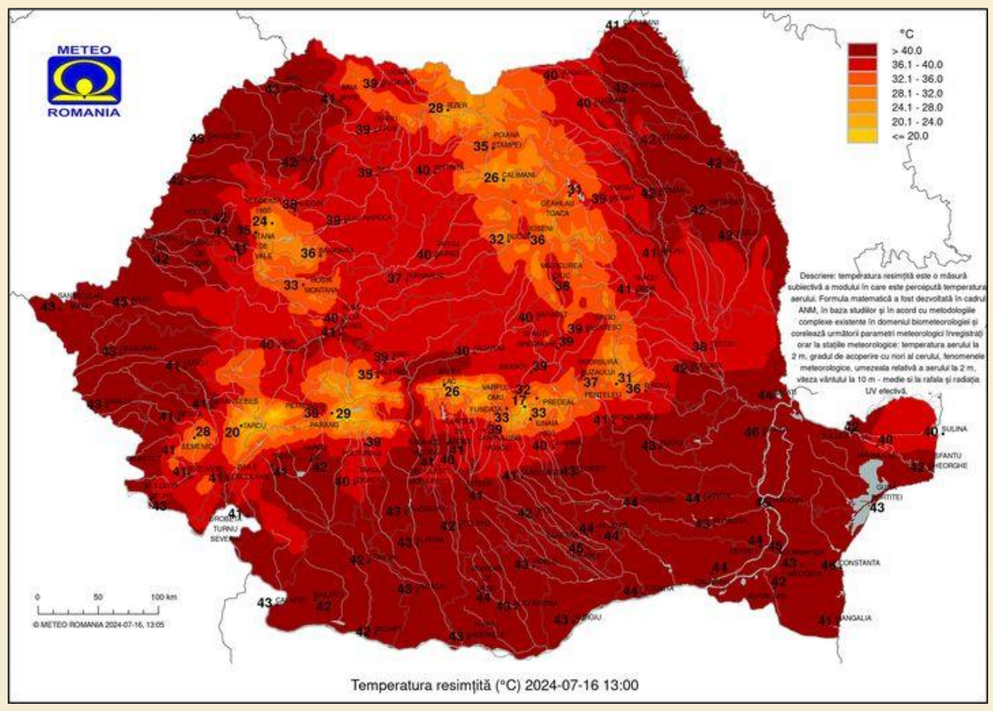
In year 2024, the highest average seed yield was registered in location Mircea Voda, county Braila with 3255 kg/ha and lowest average seed yield was registered in location Rosiorii de Vede, county Teleorman with 1207kg/ha.

Highest average seed in year 2024 were registered by sunflower hybrid HS2312CLP with 2502 kg/ha and lowest average seed yield were registered by sunflower hybrid HS1122 with 2085 kg/ha.

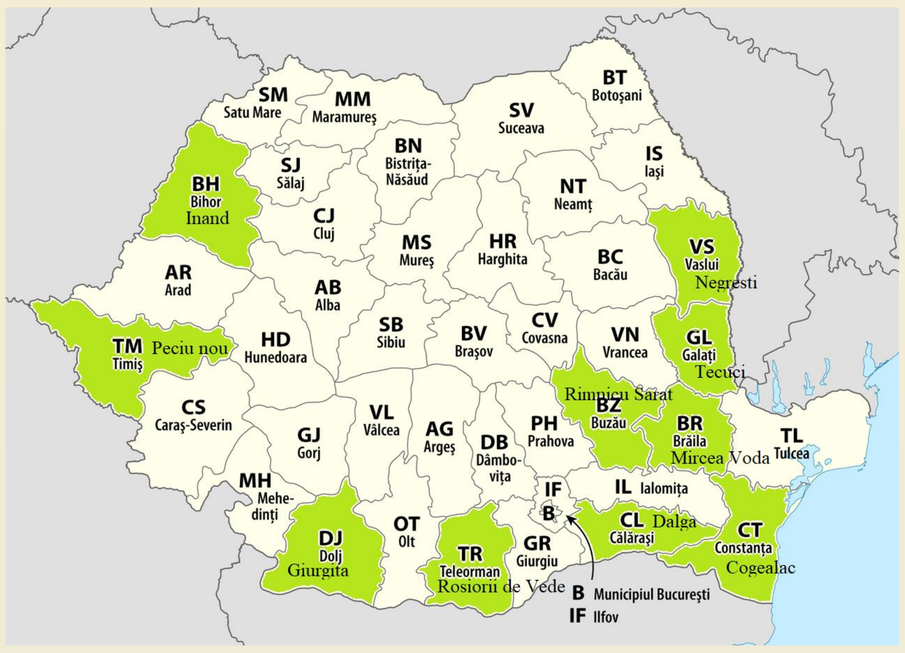


CONCLUSIONS

In year 2024, sunflower culture was affected by drought and high temperatures from months June to August who led to low seed yield at national level with an average seed yield of 1025 kg/ha. The highest average seed yield were registered in counties Braila, Timis and Galati and sunflower hybrid HS2312CLP has registered the highest average seed yield in year 2024.



Extreme summer heat registered in Romania, in July, in year 2024 (source: Administratia Nationala de Meteorologie)



Average seed yield Kg\ha, in 10 locations, in year 2024

Locality	Average seed yield kg/ha	Difference
Cogealac	1346	-953
Dalga	2532	+233
Giurgita	1883	-416
Inand	2094	-205
Mircea Voda	**3255**	**+956**
Negresti	3007	+708
Peciu Nou	3149	+850
Rimnicu Sarat	1773	-526
Rosiorii de Vede	1207	-1092
Tecuci	2743	+444
Average	**2299**	0

Average seed yield Kg\ha of six sunflower hybrids, in year 2024

Sunflower genotype	Average seed yield Kg/ha	Difference
FD15E27	2295	-4
HS9233CLP	2252	-47
HS1122	2085	-214
HS2372	2384	+85
HS2312CLP	**2502**	**+203**
HS2309E	2279	-20
Average	**2299**	0