

A GLANCE AT THE SUNFLOWER CULTURE
AND IMPROVEMENT ACTIVITIES IN TURKEY

By

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(In Absentia)

It has been about 25 years since the sunflower culture was started in Turkey. Due to the need for plant oil because of the increasing population in the country, the sunflower culture has been broadened. The area for sunflower production began to increase quite significantly after the year 1955.

Years	Area sown Hectares	Production Tons	Yield Kg. per Hectare
1954	139.200	120.000	862
1955	154.000	138.000	896
1956	168.000	102.000	607
1957	154.000	95.000	616
1958	138.000	95.000	688
1959	145.000	127.600	880
1960	137.000	123.000	897
1961	117.000	96.700	822
1962	81.000	60.000	738
1963	94.000	87.000	925
1964	160.000	165.000	1031
1965	160.000	160.000	1000
1966	218.000	200.000	917
1967	220.000	250.000	1114
1968	250.000	-	-

As it is seen in the figures above, both the area of sunflower cultivation and the amount of yield were decreased between the years 1957-1962 because of the damage from the orobanch parasite. Right after the orobanch damage, the sunflower improvement program was taken into consideration in the country. And the experiments have been started for this purpose at the Agricultural Research Institute of Yesilkoy.

The experiments have been conducted with 68 different seed materials of native and foreign origin as well. And the varieties of Soviet Russian origin have been found resistant to orobanch with

good adaptability to the conditions. Out of these, the varieties of (V.1646) and (V.6540) can be mentioned as better ones.

At present, the variety of V.1646 has been growing in Turkey since 1963. The average oil content of this variety is 46% in Turkey. And the oil percentage figures with the 1967 crop of the same variety that was grown in our Institute are shown below:

Name of the variety	Moisture content % gm.	1000 seed weight gm.	Hulled kernel % gm.	Hull % gm.	Oil Content % gm. (in dry material)	
					Whole seed	Hulled kernel
V.1646						
Yesilkoy	6.74	106.42	74.44	25.56	48.16	64.70

This seed is multiplied in the State Increasing Farms in the first hand and then it is distributed to the farmers of Turkey. The average oil percentages of the seed are as follows:

The place where the seed is multiplied	The oil percentage of the seed that was given to farmers in	
	1966	1967
Dalaman State Increasing Farm	46.76	44.84
Acipayam "	43.74	46.62
Turkgeldi "	42.97	46.16
Sarmisakli Seed "	48.35	46.47
Atabey "	46.64	46.62
Average oil percentage	45.68	46.15

The sunflower seed production was 60.000 tons and oil production was 12.000 tons in the year of 1962 when the orobanch parasite was most widely-spread.

Out of the experiments at the Agricultural Research Institute of Yesilkoy, the variety of V.1646 of U.S.S.R. origin has been grown and the seed production reached to an amount as 250000 tons in 1967 with 100000 tons of sunflower oil production. Two graphs attached to this paper show this development. The objective will be 400000 hectares of sunflower cultivation area with the 976000 tons of seed crop for Turkey.

The sunflower cultivation in Turkey has been concentrated in the districts of Thrace and Marmara. Generally speaking the Thrace district consists 75% and Marmara district 21% of all sunflower grow-

ing in Turkey.

The 'Dry-Farming system' of agriculture is prevalent in the district of Thrace where the annual precipitation averages 550-600 mm. totally. And the average temperature is 13-14.5 degrees of centigrade.

Today, the orobanch is the most hazardous parasite and hence getting the most importance, as far as the plant protection business is concerned in Turkey. The disease mildew of sunflowers has been not felt so dangerous as orobanch for the present.

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