

Table 1

Number of applications made and material used in control experiments at Buhl, Idaho, 1937

Exp. No.	Plot No.	Spray material applied	Number of applications	Date of applications
	1 14	Control or untreated	- -	- -
1	2	Kerosene 20 parts	2	6/4-10
2	6	Oil 10 parts	3	6/4-10-17
3	10	Free nicotine 2 percent	4	6/4-10-17-23
4	3	Derris 2 pounds	2	6/4-10
5	7	Aresket 6.4 ounces	3	6/4-10-17
6	11	Water 50 gallons	4	6/4-10-17-23
7	4	Kerosene 20 parts	2	6/4-10
8	8	Oil 10 parts	3	6/4-10-17
9	12	Pyrethrum 1 part	4	6/4-10-17-23
10	5	Nicotine sulphate 1 quart	2	6/4-10
11	9	Summer oil emulsion 1 gallon	3	6/4-10-17
12	13	Water 100 gallons	4	6/4-10-17-23

VARIETAL TESTS FOR RESISTANCE TO SUGAR BEET NEMATODES

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Several attempts have been made during the past ten years to select sugar beets resistant to the sugar beet nematode. Efforts to compare these selections with standard varieties encountered considerable difficulty because the first selections were not made from curly-top resistant varieties. Experiments in 1935 and 1936 were particularly disappointing because curly top developed in the experimental trials resulting in greatly reduced yields, and the added effect due to nematodes was difficult to measure. In 1935 selections for nematode resistance were made from U. S. #1 and U. S. 34 which are known to possess curly-top resistance. The U. S. #1 selection was evaluated in 1937 in comparison with 14 other curly-top resistant strains.

No particular nematode resistance was observed with the selection from U. S. #1 and neither did any of the other 14 varieties show any marked nematode resistance. The more vigorous varieties appeared to give relatively better results under the nematode exposure, but the statistical interactions were not found to be significant.

ALFALFA RESISTANT TO THE STEM NEMATODE

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An unusual illustration of nematode resistance in alfalfa was found on the Utah State Agricultural College varietal test plot near Midvale, Utah, in