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MAXIMUM AMOUNT OF FERTILIZERS RECOMMENDED FOR USE IN FOLLOWING FOOD PRODUCTION ORDER 5 (FPO 5)

"Food Production Order No. 5, Chemical Fertilizers," issued by the Secretary of Agriculture on January 18, 1943, Rev. 2, October 27, 1943, designates crops deemed essential to the war effort as "Group A" crops and all others as "Group B." The Order states that in the case of both A and B crops "the rate of application per acre shall not exceed the rate of application per acre recommended by the State Agricultural Experiment Station."

The problem of determining the need, the kind, and the amount of fertilizer to use in economical crop production is a complicated one. It not only involves many different crops but also a proportionately greater number of soils and environmental conditions, including weather. The recommendations in the following tables indicate the maximum amount of plant nutrients that may be used on each of the specific crops. These data have been gathered from Experiment Station and Extension work in Farm Crops, Horticulture, Vegetable Gardening, and Soils, together with successful practices used by growers in the different sections of the state.

The most profitable type and amount of fertilizer to use will vary not only with the kind of crops but also with the kind of soil, the supply of water, farm manures, the use of green manure crops, and the particular section of the state. The use of farm manures and green manure crops will reduce materially the need for chemical nitrogen and potassium.

TABLE I. MAXIMUM AMOUNT OF FERTILIZERS PER ACRE RECOMMENDED FOR USE IN FOLLOWING FOOD PRODUCTION ORDER 5 (FPO 5) FOR 1944

GROUP A CROPS

		Nitrogen lbs. (Per Acre)	Phos. (P_2O_5) lbs. (Per Acre)	Potash (K_2O) lbs. (Per Acre)
1	Hybrid corn for seed	32	48	16
2	Beans, Dry	0	45	0
3	Beans, Snap	80	160	80
4	Beans, Lima	24	72	24
5	Cabbage	50	100	100
6	Onions	60	200	200
7	Peas (processed)	16	48	16
	Peas	40	120	40
8	Potatoes, Irish (Irrigated)	64	80	100 1/
	Potatoes, Irish (Non-irrigated)	32	50	50
9	Sweet Corn	20	60	20
10	Tomatoes	50	100	100
11	Vegetable Seed	100	100	100
12	Sugar Beets Seed	150	90	50

1/ Reduce potash one-half except on peat and muck soils.

The rates per acre of these ratios may be obtained or closely approached by using the proper rate per acre of the grades of fertilizer approved for use in Oregon, the use of simples, or combinations of the two. The figures 24-72-24 are equivalent to 600 lbs. of 4-12-4, and the figures 32-48-16 are equivalent to 400 lbs. of 4-12-4 plus 100 lbs. of a nitrogen carrier analyzing 16 percent nitrogen.

TABLE II. MAXIMUM AMOUNT OF FERTILIZERS PER ACRE RECOMMENDED FOR USE IN FOLLOWING FOOD PRODUCTION ORDER 5 (FPO 5) FOR 1944

GROUP B CROPS

		Nitrogen lbs. (Per Acre)	Phos. (P_2O_5) lbs. (Per Acre)	Potash (K_2O) lbs. (Per Acre)
1	Asparagus	50	100	100
2	Beets	50	150	100
3	Carrots	50	100	100
4	Cauliflower	50	100	100
5	Broccoli	50	100	100
6	Brussels Sprouts	50	100	100
7	Celery	60	200	200
8	Cucumber (process)	50	100	100
9	Dill	32	40	
10	Eggplant	50	100	50
11	Kale	50	100	100
12	Parsnips	50	100	100
13	Radish	24	50	50
14	Spinach	100	100	60
15	Rutabaga	50	100	100
16	Squash & Pumpkin	16	48	50
17	Turnips	50	100	100
18	Irrigated: Apples, Cherries, Pears, Peaches, Prunes	160 (Old Trees) / 80 (Young Trees)	60 / 60	20 / 20
19	Nonirrigated Orchard*	50	60	0
20	Cane Fruits	50	100	100
21	Strawberries	50	100	100
22	Peppermint	32°	50	50
23	Bulbs	30	100	100
24	Corn Field	32	48	16
25	Grass Seed	60	60	0
26	Pasture	60	90	0
27	Sugar Beets	30	90	0
28	Flax	20	0	0
29	Hops (irrigated)	64	80	80
	Hops (nonirrigated)	32	40	40
30	Grain	30	100	

* On cover crop.
o Reduce one-half on peat soils.

The grades of fertilizers approved for Oregon are as follows:

0-12-20	4-24-4	9-4-6
3-10-10	5-6-8	10-12-14
3-10-20	5-10-5	10-16-8
4-12-4	5-10-10	10-20-0
4-24-0	6-10-4	12-12-0
	6-30-0	

Nitrate of soda	16-0-0
Nitrate of soda-potash	14-0-14
Sulphate of ammonia	20 (or higher)-0-0
Cyanamid	20 (or higher)-0-0
Uramon	42-0-0
Ammonium phosphate	11-48-0 or 16-20-0
Superphosphate	0-18 (or higher)-0
Muriate of potash	0-0-50 (or higher)
Sulphate of potash	0-0-48 (or higher)
Manure salts	0-0-22 (or higher)
Sulphate of potash-magnesia	0-0-18 (or higher)
Basic slag	Any grade
Ground phosphate rock	Any grade
Colloidal phosphate	Any grade
Cotton hull ash	Any grade
Wood ash	Any grade
Victory garden fertilizer	6-10-4

Victory garden fertilizer must be of Grade 6-10-4. A victory garden is one planted primarily for the non-commercial production of vegetables and small fruits.