

# WEED SEED FACTS

O. A. STEVENS

**W**EEDS are one of the chief problems of the farmer, and weed seeds in the soil are a continual source of increased operating expenses and of losses in crop yields. Many weed seeds are scattered by wind, some by water and by animals, but the chief sources of seeds in the soil are those planted in uncleaned crop seed, and those produced by the weeds which were allowed to mature.

A single plant will bear thousands of seeds. A pure stand of Frenchweed was found to produce 150,000 seeds per square yard. (See list on page 4 for additional weed seed yields.)

Many weed seeds have hard seed coats, do not germinate readily, and may remain alive in the soil for many years. Seeds of mustard, dock and pigweed have germinated after being buried in the ground for 50 years. The tiny seeds of mullein and evening primrose also lived thru, but grass seeds did not survive so well.

Frenchweed, wild oats and lambsquarters are the first to grow in the spring. Pigweed and kinghead start a little later; pigeon-grass is tender to frost and starts late in the spring. Purslane does not start until the soil is warm and dry.

Not many seeds germinate during midsummer. Some Frenchweed seeds germinate in fall. Seedlings from these fall germinated seeds live thru the winter and continue growing in the spring. Peppergrass, other mustards and prickly lettuce do the same. Wild oats and other weed seeds may germinate in the fall but the plants fail to live thru the winter.

Pigeon grass, wild oats and wild buckwheat, preferably ground, can be used for feed in place of barley up to two-fifths of a grain ration. Cockles, mustards and small weed seeds are not good for feed and should be used for fuel.

The way to free the soil of weed seeds, is to allow them to grow and then destroy the seedlings. Attention to the natural time of germination will help to plan the most effective work. One or more cultivations at the proper time before seeding, or summerfallow before June 1, will destroy quantities of seedlings. After that date the growing plants rapidly reduce the soil moisture and soon begin to ripen seeds.

Do not neglect to clean seed grain. A thimbleful of pigweed seeds would be hidden in a cupful of wheat or clover, but would amount to 5500 seeds.

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EXTENSION SERVICE

NORTH DAKOTA AGRICULTURAL COLLEGE AND U. S. DEPARTMENT OF

AGRICULTURE COOPERATING

E. J. Haslerud, Director, Fargo, North Dak

Distributed in furtherance of Acts of Congress of May 8, 1914, June 30, 1914.

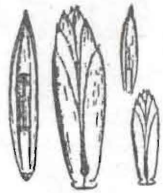


**SOME COMMON WEED SEEDS**

Natural Size and Enlarged



Wild oats



Quackgrass



Field bindweed



Leafy spurge



Dodder



Canada thistle



Sow thistle



French weed



Witchgrass



Yellow pigeongrass



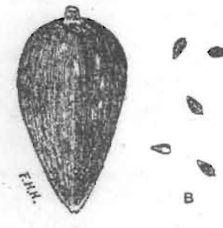
Green pigeongrass



Barnyard grass



Dragon head



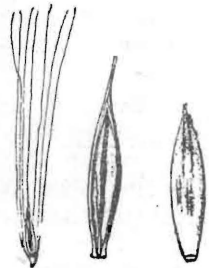
Marsh elder



Prickly lettuce



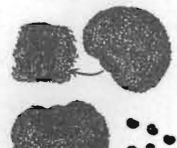
Hare's ear mustard



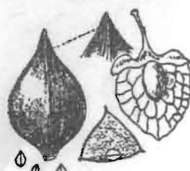
Wild barley



Wild buckwheat



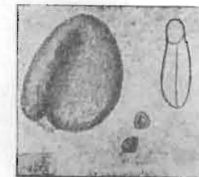
Catchfly



Dock



Mustard



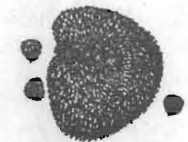
False flax



Tumbling Mustard



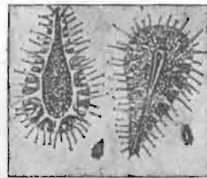
Wild rose



Corn cockle



Pink cockle



Stickseed



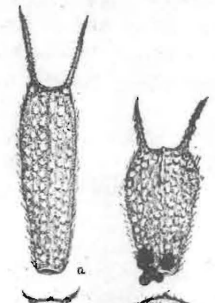
Tumbling pigweed



Pigweed



Narrow-leaved vetch



Beggar ticks



King's crown



Ragweed



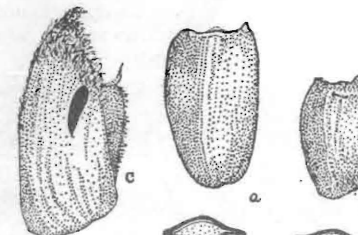
Russian thistle



Lambsquarters



Sunflower



Long-headed Coneflower



Goldenrod

## SEED PRODUCTION OF INDIVIDUAL PLANTS

Actual yield of an average, well developed plant. The weight in grams per 1000 (or mg. each) will help anyone to judge the size of an unfamiliar seed by comparing its weight with that of some other kind.

	No. per plant	Wt.	No. in 1 oz.		No. per plant	Wt.	No. in 1 oz.
Barley, Wild .....	2,420	1.1	25,800	Marsh Elder .....	82,150	1.2	23,600
Beggar Ticks .....	7,000	3.5	8,100	Mullein .....	223,200	0.09	315,000
Buckwheat, Wild ....	11,900	7.0	4,000	Mustard, Ball .....	490	3.0	9,450
Buffalo Bur .....	8,460	2.3	12,300	Mustard, Common ..	2,700	1.9	15,000
Burdock .....	31,600	7.5	3,800	Mustard, Dog .....	8,480	0.4	70,500
Catchfly .....	1,800	0.8	35,400	Mustard, Hare's-ear	3,800	2.1	13,500
Cinquefoil .....	48,600	0.13	218,000	Mustard, Tumbling ..	80,400	0.17	167,000
Cockle, Pink .....	4,300	8.8	3,200	Oats, Wild .....	250	17.5	1,600
Coneflower, Long-headed .....	7,000	0.4	70,700	Peppergrass .....	6,000	0.25	113,400
Dandelion .....	15,000	0.5	56,700	Pigweed, Creeping..	14,600	0.95	30,000
Dock, Curled .....	29,500	1.4	20,200	Pigweed, Rough .....	117,400	0.38	74,600
Dodder, Field .....	16,000	0.8	35,400	Pigweed, Tumbling..	129,000	0.23	123,300
Dodder, Hazel .....	7,000	2.2	12,900	Plantain, Common ..	36,150	0.2	141,700
Dragonhead .....	49,600	2.6	10,900	Purslane .....	52,300	0.13	218,000
Evening Primrose ..	118,500	0.3	94,500	Ragweed .....	3,380	3.9	7,200
False Flax (large seeded) .....	1,970	2.6	10,900	Shepherd's Purse ..	38,500	0.1	283,500
Flixweed .....	75,650	0.12	236,000	Smartweed .....	19,300	1.5	18,900
Frenchweed .....	7,040	0.8	35,400	Spurge, Leafy (1 stem) .....	140	3.5	8,100
Goldenrod, Stiff .....	3,290	0.5	56,700	Spurge, Thyme- leaved .....	2,670	0.3	94,500
Grass, Barnyard .....	7,160	1.4	20,200	Stickseed .....	2,120	1.3	21,800
Grass, Green Pigeon	34,000	1.5	18,900	Sunflower, Common	7,200	6.6	4,300
Grass, Yellow Pigeon	6,420	4.2	6,700	Sunflower, Narrow- leaved .....	2,600	2.2	12,900
Grass, Stink .....	82,100	.075	375,000	Thistle, Canada (1 stem) .....	680	1.6	17,700
Grass, Witch .....	11,400	0.6	47,200	Thistle, Russian .....	24,700	1.7	16,700
Gumweed .....	29,700	0.6	47,200	Thistle, Perennial Sow (1 stem) .....	9,750	0.4	70,500
Hemlock, Water .....	5,500	1.5	18,900	Vetch, Narrow- leaved .....	150	18.2	1,550
Kinghead .....	1,650	17.4	1,600	Wormwood .....	1,075,000	0.07	375,000
Knotweed .....	6,380	0.7	40,000				
Lambsquarters .....	72,450	0.7	40,000				
Lettuce, Prickly .....	27,900	0.5	56,700				
Mallow .....	47,500	1.3	21,800				

The above table is compiled from a more detailed report upon North Dakota weed seeds in the American Journal of Botany for November, 1932—Stevens, O. A. The Number and Weight of Seeds Produced by Weeds.