

OREGON AGRICULTURAL COLLEGE EXTENSION SERVICE

RALPH D. HETZEL, Director.

CULTURAL METHODS OF IMPORTANT LOCAL CROPS IN WESTERN OREGON.

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With most of our local crops, better yields could be secured by practicing better cultural methods.

I. IMPROVEMENT OF CROPS.

A. Better seed.

1. Varieties adapted to local conditions. 2. Have breeding plot.

B. Pure seed.

1. Free from admixtures of other varieties. 2. Free from weed seeds.

C. Clean seed.

1. Fanning mill to take out light seed and chaff, dirt, sticks, small weed seeds, etc. 2. Grader—seed only heavy, plump seed.

Note. Nebraska Experiment Station reports 4.6 bu. wheat average increase an acre for cleaning and grading. Minnesota reports an increase of 36 per cent for graded seed wheat and $9\frac{1}{2}$ bushels an acre on oats.

It costs from 2 to 5 cents an acre to clean and grade the seed grains.

D. Treated seed.

1. For stinking or closed smut of wheat, either Solution of 1 pound (or pint) of 40 per cent Formalin—40 gallons of water,

Sprinkle grain and stir thoroughly on barn floor, and cover with blankets or sacks 10 or 12 hours, dry, and seed. If more convenient immerse in burlap bags 30 minutes and drain dry.

or Bluestone, 1 lb., 1 lb. of common salt—5 gallons of water.

Immerse sacks of grain 10 minutes, dry and seed.

Oats and Barley—Formalin treatment—1 lb. 40 per cent Formalin—45 gallons water. Apply as for wheat except, if immersing, only till grain gets thoroughly wet.

Note. Where possible, test treated grains before planting. In any case seed slightly more of treated grains.

Potatoes for scab,—1 lb. 40 per cent formalin—30 gallons water. Immerse 2 hrs. Treat after cutting.

E. Tested seeds.

1. Test seeds for germination. Take 100 seeds place between moist blotters on dinner plates one inverted over other. Sand or saw dust germinator for corn and other large seeds.

N. B. The Experiment Station and the U. S. Department of Agriculture, co-operating, maintain a seed-testing laboratory. Have your seeds tested for germination and purity, free. Send in representative samples to the Seed Testing Laboratory at Corvallis.

The bulletins of the Oregon Agricultural College are sent free to all residents of Oregon who request them.

CLOVER.

Red clover to be preferred. Alsike clover best for poorly drained soils.

A. Methods of seeding.

Amt.—8 to 12 pounds of high-testing red clover seed an acre. Alsike 5 to 8.

1. Broadcast in February on fall sown grain.
2. Seed with spring sown oats, Mar.
3. Seed with spring sown barley early Apr.
4. Seed about middle of April to middle of May with rape.
5. Seed alone, prepare land well, clean. Cultivate fore part of season, seed about May 1 to 10. This method applies to seeding on lands of bad physical condition. 1st, 3rd or 5th methods best suited to average cases in Western Oregon.

B. For seed—Pasture or clip back the clover in spring.

C. Clover Insect Pests.

1. "Clover Root Borer."

Control—Plow clover sod soon as first crop is harvested the second year. Practice a crop rotation.

2. "Seed Chalcid" and seed midge.

Control—make first cutting of clover when blooms first appear.

Note. For further information on clover pests write the Entomology Department, O. A. C.

VETCH.

Vetch may be sown any time in the fall but preferably in Oct.

Seed—

1. Variety, ordinary smooth spring vetch.
2. Amt., 100 to 120 lbs an acre when sown alone for seed.
3. Seed with cereal, oats or barley or rye for support. 1 bu. of grain and 1 bu. of vetch to the acre.
4. Fine for soiling purposes. Makes a good hay, or seed crop.

Note. Cut vetch for hay when seeds begin to form. For seed when the seeds in lower pods begin to turn brown.

Vetch is good fore-runner of clovers.

CANADA FIELD PEAS.

Adapted to well drained, sweet, loamy soils.

I. SEED—

A. Variety—Best obtainable on local markets.

1. White Canadian.

2. Blue Prussian.

B. Time—Early as possible for W. O. Feb. or early March. Late seeding usually unprofitable.

C. Amt.—One and one-half to two bu. to the acre, 3 in. to 4 in. deep. Seed one week later 1 bu. oats crosswise the pea rows and at a depth of one inch.

D. Use—Excellent hog and sheep feed. Hog or sheep off. Good soiling crop. Peas and barley good silage crop.

Yields—Seed 20 to 30 bus. an acre, cut when lower pods are ripe. Cut and thrash immediately on account of damage of weevil.

For hay cut when in table stage.

RAPE.

Rape is a valuable forage crop for hogs and sheep, adapted to Western Oregon.

Fertility—Manure well with barnyard manure 8 tons to the acre.

I. SEED—

A. Variety—"Dwarf Essex."

B. Time—at intervals of 2 to 3 weeks through season till late summer.

C. Amt.—In drills 2 to 3 lbs. to the acre. Broadcast 3 to 4 lbs.

If seeded in rows cultivate and cut for soiling or pasture; if broadcast, pasture off. Clover and rape make excellent sheep and hog pasture.

ROOT CROPS.**Mangels—**

Adapted to our cool, moist climate, and to deep, mellow, fertile soils. Deep, well prepared seed beds necessary to successful root growing.

I. Seed bed—Plow land in fall, lie rough in winter, spring coat with 10-15 tons of manure to the acre, disc and replot and work down thoroughly.

II. Seed,—**A. Varieties,**

1. Golden Tankard,

2. Mammoth Long Red.

B. Amt.—5 to 8 pounds drilled in rows 2½ ft. apart.

C. Thinning—Block out with hoe and thin from 8 to 12 inches in row.

D. Cultivation—Cultivate thoroughly.

E. Harvest with beet lifter on plow.

Late fall when ripe as indicated by leaves turning yellow but before heavy frost.

Note. Other root crops handled very much the same; for details write the Agronomy Department, O. A. C.

KALE.

Send for circular on Kale Growing by the Department of Agronomy, O. A. C.

POTATOES.

Send for College Bulletin 121, "Growing the Oregon Potato Crop," by Professor H. D. Scudder, O. A. C.

CORN.

Send for College Bulletin 124, "Corn in Oregon," by Professor H. D. Scudder, O. A. C.

ALFALFA, WESTERN OREGON.

Circular letter by Professor H. D. Scudder, O. A. C.