

WESTERN OREGON ALFALFA CULTURE

Soil, Seed and Culture, Important Factors in Growing Good Successful Crop

PROF. SCUDDER TELLS HOW

Second Year is Hardest Year and Should Not Cause Discouragement to Grower.

In view of the growing interest in alfalfa production in different parts of Oregon, the following information



Alfalfa in Western Oregon. Left, unirrigated; right, irrigated.

concerning the culture and care of the crop, prepared by Professor H. D. Scudder, of the Oregon Experiment Station, may be very helpful to farmers not fully informed as to the most approved methods.

A deep, naturally well drained soil, clean of weeds, is to be preferred. The soil should be sweet. If sour, it should be dressed in March with an application of two tons of ground limestone per acre, or one ton of quick lime, water slacked, the same to be thoroughly disked in after applying.

The need for liming can be determined by testing the moist soil with neutral litmus paper, which may be obtained of any druggist. A strip of litmus paper pressed between two pieces of moist soil indicates acidity and need for lime if the paper turns pink. Agricultural lime at present prices is too costly to be used extensively, but for small trial acreages of alfalfa the liming is advised, although successful alfalfa crops frequently have been obtained without liming. In southern Oregon, of course, the soils are seldom if ever acid, and liming is not required.

The seed bed should be double-disked, then plowed either in the fall or early spring, thoroughly re-disked again after plowing in the spring, and then kept thoroughly cultivated until seeding time in May—a seed bed well pulverized on top but firm underneath being the object. A dressing of well

rotted manure at the rate of six to eight tons per acre may be thoroughly disked in during February or March after the ground has been plowed. Fresh manure should be avoided unless free of weed seed.

Tested, dodder-free seed, preferably Dakota-grown, such as the Martin's Acclimated (Disco 38) or the Baltic, which may be secured of the Dakota Improved Seed Company, Mitchell, South Dakota, is recommended. The common variety of alfalfa, northern grown seed, such as the strains named, is superior to any other variety for Oregon conditions.

The seed should be inoculated before sowing, with alfalfa culture, which may be obtained of the O. A. C. department of Bacteriology.

The seeding should be at the rate

of 15 to 18 pounds per acre of good seed, broadcasted with a chest seeder or wheelbarrow seeder or the like, and then lightly but thoroughly harrowed in, pains being taken not to cover it more than an inch and a half.

No nurse crop of any kind need be used and no live stock should be allowed to pasture on the alfalfa the first year.

Following seeding the ground is rolled and then lightly harrowed again the rolling particularly necessary if the soil is loose and over dry.

The alfalfa the first year should be clipped as frequently as necessary to keep down the weeds, the cutter bar being set 4 to 5 inches from the ground, and the clippings, if not too heavy, being left on the ground.

In the spring of the second year the ground should be thoroughly cultivated with a disk harrow set straight and run crosswise, followed by the peg tooth harrow. If the soil lacks fertility, a top dressing of well rotted manure ought to be given during February or March. Fresh manure will not do, on account of danger of weeds.

It should be remembered that the second year is generally the most difficult one for alfalfa in Western Oregon, as the tap roots are then fighting their way through the heavy subsoil. Hence, the best of care should be given that year and the crop not plowed up even if it does look weak and a failure.



Figs in Alfalfa.

SEEDING POINTERS FOR THIS FALL

Unusual Conditions Require Special Seed and Cultural Methods

LATE RAINS THE CAUSE

Fall Sown Grain Stools but Little After October 15, Requiring More and Better Grain.

Owing to the lateness of the fall rains and the consequent delay in getting grain, vetches, etc. seeded, it will be necessary to take rather unusual precautions in order to get a sufficient stand of crop to produce a good yield next year.

First, the seed should be very carefully graded and fanned in a good fanning mill and grain grader in order to eliminate all small, shriveled, weak and damaged seed as nothing but the large seed will germinate well at this late season after the soil has cooled off. All the wheat, oats and barley seed should be treated for smut in order to eliminate any difficulty with that disease. The treatment should be made now so that seeding will not be delayed at all when favorable weather comes.

Since the seeding is now about one month late, it will be necessary to use more than the normal amount of seed per acre. Late-seeded grain never stools out or branches out as much as early-seeded grain. The ordinary rates of seeding which are good from September 15 to October 15 are as follows for average grain under good average western Oregon conditions:

Winter wheat—6 to 7 pecks.
Winter barley—7 to 8 pecks.
Winter oats—8 pecks.
Winter rye—5 pecks.

Vetch and oats (mixed half and half by volume)—2 to 2½ bushels.

Vetch alone—60 to 80 pounds.

After October 15 when these plants do not stool out or branch out freely, considerably larger quantities of seed must be used if a good stand is to be secured. The plantings should then be as follows:

Winter wheat—8 pecks.
Winter barley—8 to 9 pecks.
Winter oats—10 pecks.
Winter rye—7 to 8 pecks.

Vetch and oats (mixed half and half by volume)—2½ to 3 bushels.

Vetch alone—80 to 100 pounds.

In this way, by getting more seed per acre and more plants per acre, there will still be a sufficient stand to make a good crop though the plants do not stool out as much.

In addition to having nothing but good, heavy, clean seed, treated and free from smut and using a sufficient quantity of it to guarantee a stand, the depth of seeding should be shallow. After the rains begin and the soil cools off considerably, germination takes place much more slowly at two to three inches deep in the soil than it does at one inch. Many plants will not germinate at all three inches deep in the soil but will give an excellent germination when planted near the surface. Therefore, all of the seeding of the various plants mentioned above should be made shallow, preferably not deeper than an inch. In this way, better germination and stronger plants and a better stand may be secured. These latter rates of seeding are not applicable to the ordinary year but are necessary in this exceptional year when the fall rainfall is so light.—G. R. Hyslop, soils and crop specialist at O. A. C.

OREGON HENS CLINCH HOLD ON FIRST PRIZE

Oregon Agricultural College, Corvallis, Oct. 25.—With but six weeks of the Panama-Pacific Exposition egg-laying contest to be run, the O. A. C. White Leghorns have firmly established themselves in first place. Even if

they were to lay off altogether for the remainder of the term their position would still be secure. The October 1 report shows that they are 245 eggs ahead of the nearest competitor, not counting the other O. A. C. pens—a lead that cannot now be overcome.

The three Oregon College pens continue their lead, Leghorns first, Oregon second and Barred Rocks third. The Oregon are 52 ahead and the Rocks 16 ahead of the closest pen, Adams' Sanada White Wyandottes. The College Rocks suffered an accident last month when one of them was accidentally killed, that may affect their lead. The ten highest pen records for the first 10 ½ months of the contest are as follows:

	Eggs
Oregon Agricultural College	
White Leghorns	1554
Oregon Agricultural College	
Oregona	1361
Oregon Agricultural College	
Barred Plymouth Rocks	1325
Adams, Canada, White Wyandottes	1309
Bonnie Brook Farm, N. Y., White Leghorns	1212
Dean Bros., B. C., White Wyandottes	1205
McCord, Calif., Rhode Island Reds	1197
Tom Barron, England, White Leghorns	1184
Shupe, Washington, Leghorns	1150
Sherman, Lebanon, Ore., Plymouth Rocks	1149

These are the highest pens for the month of September:

	Eggs
McCord, Calif., Rhode Island Reds	124
Oregon Agricultural College	
White Leghorns	120
Haynes, Idaho, White Wyandottes	111
Adams, Canada, White Wyandottes	109
Dean Bros., B. C., White Wyandottes	99
Oregon Agricultural College	
Barred Plymouth Rocks	98
Shupe, Washington, White Leghorns	96
Tarbox, Ill., Silver Wyandottes	94
Robinson, Calif., Barred Plymouth Rocks	90
Oregon Agricultural College	
Oregons	87

The ten highest individual hen records, seven being O. A. C., for the period to Oct. 1 are:

	Eggs
Sherman, Lebanon, Oregon, Oregon Agricultural College	
Barred Plymouth Rocks	195
Oregon Agricultural College	
White Leghorns	193
Oregon Agricultural College	
White Leghorns	189
Oregon Agricultural College	
Oregons	187
Tom Barron, England, White Leghorns	178
Oregon Agricultural College	
White Leghorns	175
Oregon Agricultural College	
Oregons	164
White Leghorns	164
Dollenbacher, Wash., Black Minorca	163
Oregon Agricultural College	
Barred Plymouth Rock	161

SECOND REGIMENT FORMED

Owing to the fact that more cadets at the O. A. C. are reporting for military drill this year than ever before, a second regiment has been formed with one battalion of four companies, Godfrey R. Hoerner, of Seattle, has been placed in command, with the title of Lieutenant-Colonel.

TO TEST COWS NEXT MONTH

(Milton Eagle.)

Testing of cows by the expert of the Walla Walla Valley Cow-Testing association, will be commenced Nov. 1, according to announcement last week. Another meeting of the directors will be held October 23 at the Commercial Club, Walla Walla, to select the expert who will do the work. One or two more herds could be accommodated in the association.