

ALFALFA OR LUCERN.

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No forage crop has come to the front with such great promise as that of alfalfa. Ten years ago it was practically unknown in Wisconsin and now thousands of farmers are growing it successfully. Alfalfa is the crop that is largely instrumental in now maintaining our great live stock industry of the west and it will soon be the mainstay of the dairy products thruout our country.

A large portion of the income of the dairymen is spent for high protein feeds used to balance the feeding ration for dairy cows with carbonaceous feeds which are now grown generally upon the farms. With the advent of alfalfa the protein can be grown near at hand upon the farm at a great saving to the farmer in time and money.

Alfalfa is not only a good feed for dairy cattle but is also an excellent feed for all kinds of live stock. Sheep, hogs and poultry are as fond of it as dairy cattle and will make good gains when alfalfa forms a portion of the ration.

Testing the Seed.

Previous to sowing alfalfa the farmer should send to different seed companies and get samples of seed and make a germinating test as much of the seed put upon the market is low in vitality. A satisfactory test can be made by using two plates with cotton flannel pads. One plate should be a trifle smaller then the other and used as a cover. The pads should be dampened and one put on the lower plate. One

hundred seeds are put upon the pad and the other pad placed over the seeds. The smaller plate is used as a cover to withhold moisture. From three to five days is sufficient to make a test. No seed should be purchased that will not give a germinating test of at least 85 per cent.

Selection of the Ground.

High, well drained land should be selected as alfalfa will not do well on soggy land or on land that is subject to overflow. Alfalfa will grow on a wide variation of soils but a nice loam on top of a gravel subsoil is especially desirable. Rolling land is preferred to that of low level land, as it affords better drainage.

Manner of Seeding.

Fall plowed land is preferable to that of spring plowing, but good crops can be grown on either, where the land is handled properly. The fall plowed land should be double disked both ways as soon in the spring as the ground works well; follow the disk with a plunker or roller if the ground is inclined to be uneven or lumpy. Put in a nurse crop of barley or oats if the ground is very weedy, using about one bushel of seed per acre. If the grass seeder attachment is used on seeder or drill the alfalfa and nurse crop can be sown with the one operation. After sowing the seed a fine tooth harrow should be run over the ground at least once. If season is promising the nurse crop of barley or oats can be harvested in the usual manner; but if the nurse crop should lodge it should be cut for hay and removed from the land or it will smother the young alfalfa plants. Unless conditions are exceptionally favorable no cutting of alfalfa can be obtained the first season of sowing as the first seasons growth is left for winter protection. The season following the seeding from three to four crops may be taken if cut at the proper time. Where alfalfa is seeded without a nurse crop the ground should be cultivated with a disc and a fine tooth harrow until May 15th or June 1st. Weeds will then have been quite thoroughly killed and the ground will be in

fine condition to sprout the alfalfa seeds in the shortest possible time. Where a nurse crop is not used frequently a cutting of alfalfa can be secured by September 1st.

Cutting Stage

Alfalfa should be cut at the time that the first blossoms appear. When about one tenth of the plants are in bloom, the crop should be cut if weather conditions are favorable. The cutting bar of the mower should be slightly raised so as not to cut so close as to injure the alfalfa root buds at the surface of the ground.

Curing the Hay.

Alfalfa is cured in practically the same manner as heavy cuttings of clover. Hay caps are very beneficial in curing alfalfa and the farmer is assured of a better quality of hay where he resorts to their use. When weather is fine alfalfa cut in the forenoon can be raked, cocked and capped in the afternoon. After curing two or three days in the cock it should be slightly spread out in the forenoon and hauled in the barns in the afternoon.

Feeding Values.

Alfalfa has approximately the same feeding constituents as bran and for dairy cattle is worth as much per ton. At the Wisconsin station farm experiments were carried out to determine the comparative yield and feeding constituents of alfalfa, clover, timothy and brome grass which are herewith given.

Calculated yield per acre in pounds of alfalfa, clover, timothy and brome grass.

ALFALFA.

No. of Cutting.	Green substances	Hay.	Dry matter.	Protein.	Fat.
1.....	12,456	4,000	3,400	772	89
2.....	9,760	3,200	2,600	508	84
3.....	5,180	1,780	1,500	328	63
4.....	4,980	1,820	1,400	388	52
Total of 4 cuttings	32,376	10,800	8,900	1,996	288

CLOVER.

1.....	11,020	3,260	2,767	425	57
2.....	4,620	1,740	1,470	235	38
Total of 2 cuttings	15,640	5,000	4,237	661	95

TIMOTHY.

1.....	10,290	4,720	3,785	224	90
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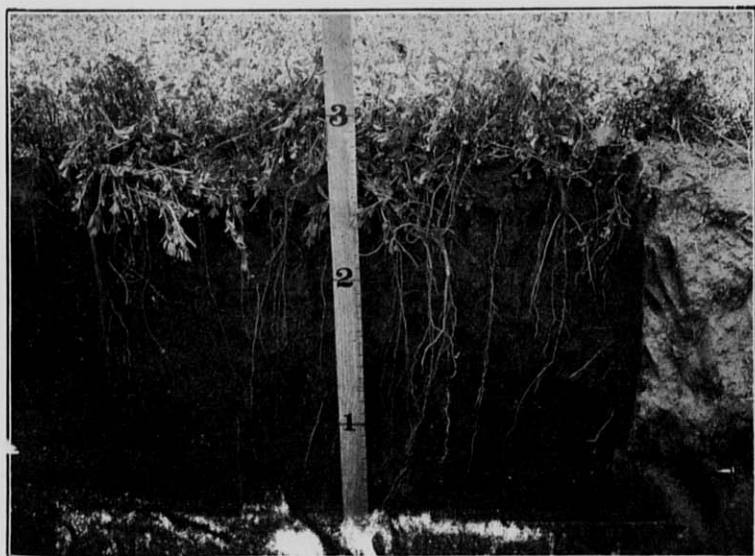
BROME GRASS.

1.....	5,842	2,600	1,938	158	47
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From the protein basis, alfalfa gave a yield per acre of three times that of clover, nine times that of timothy and twelve times that of brome grass.



Protection afforded tender alfalfa plants by a thin seeding of barley during the early period of growth.



Root development of yearling alfalfa plants.

