

one-quarter acre with common alfalfa. This also was sickly the first year, but since is doing extra well, yielding three crops each season. This plot I feed green to the herd bull and bull calves, commencing to feed about June 15th, when the alfalfa is about two feet high. This plot, with what grass I cut round the yard, keeps from five to seven head in feed until about the end of August. Three years ago I sowed one and one-half acres in an open field to alfalfa, that was used previously as a hog pasture for a few years, then plowed up and seeded to rape and turnips. The soil in this field is ordinary black loam with clay subsoil, one end being decidedly wet and springy. I may say that I seeded the wet end more for experiment than in the expectation of securing a satisfactory crop. As from reading I understand that water should not be within eight feet of the surface in ideal alfalfa soil. But contrary to expectation the wet piece is the best, giving two very heavy cuttings each season for the last two years, with no winter-killing. The remainder of the plot was badly thinned last winter, as there was little or no snow.

Last spring I seeded about one-eighth of an acre with Grimm's alfalfa on light soil in the open without any protection. If it survives, especially after the extra dry fall, I will have no hesitation in recommending this as a perfectly hardy variety. I may say that I never inoculated either seed or soil; but can do so in future from my own soil. From what little experience I have had, I will say that there is no more profitable crop I can raise than alfalfa. It is, as far as I know, the earliest to cut, the heaviest cropper, yielding four to six tons of cured hay, and is very palatable and high in feeding value. There are few if any farms which could not have their plot of alfalfa, and there are many districts in this province where it could be grown without any protection. Where red clover will winter there should be no trouble with alfalfa.

Man.

K. McIVER.

### Alfalfa, Five Tons per Acre

EDITOR FARMER'S ADVOCATE:

I have had very fair success growing alfalfa. In 1908 I seeded half an acre, cut it that year and left the cutting on the ground as protection for the plants. Last year the half acre yielded two and one-half tons from two cuttings, being at the rate of five tons per acre.

I seeded at the rate of twenty pounds per acre, inoculating the seed with nitro-culture. The variety was Turkestan, it being chosen because the experimental farms recommend it as being hardier than the common varieties. The land had been broken two years previous and had been in oats the year before the alfalfa was seeded. I gave it a dressing of barnyard manure in the winter, spreading it on the surface. In the spring the land was plowed to a good depth, harrowed and rolled until I got a good, fine seed bed. The seed was sown by hand and harrowed once after seeding. No nurse crop was used. As an experiment I seeded a strip without inoculating the seed. The plants came up and survived, but were fully six inches shorter than plants from the inoculated area and of a sickly color. Of course it inoculates itself from the other.

I would strongly advise every farmer to sow a small piece of alfalfa and add to it each year. Soil may be obtained from the first patch for the inoculation of the remainder. And do not forget to manure the land well. You can't get it too rich. If the soil has never grown alfalfa before and you can get no soil from fields that have grown it, be sure to inoculate the seed. Select a fairly level piece of land for alfalfa and see that no water can stand on it. Get the right kind of seed, even if it does cost a little more, and do not let the stock pasture on alfalfa, as they eat the crown down too closely.

Alfalfa is the most valuable crop we can grow. Last fall when the grass dried up I fed my cows alfalfa and they milked fine all fall. It is the greatest feed I ever saw for brood sows and is ideal for chickens in winter.

Alta.

E. WALTON.

### Handling Winter Wheat

EDITOR FARMER'S ADVOCATE:

In answer to your subscriber from Medicine Hat, enquiring about winter wheat which was sown too late to germinate last fall, it is my opinion that such wheat if left to germinate when spring comes has a chance to make a crop, but will be later than if it had started last fall. If the season is favorable this field may make as good crop as spring wheat, but it is sure to be a little later than the spring variety. Your enquirer does not say what kind of wheat he sowed. I think any variety would come on and mature in an ordinary season, even if it did not start during the fall; but some varieties are earlier than others, and some seasons shorter than others, so if the variety were of the latest and the season an extraordinarily short one the crop might not fully mature. I should be inclined to give this wheat a chance. I think that in the Medicine Hat country there would be but a very few seasons that our ordinary winter wheat would not ripen.

It may be that the weather will continue dry during the spring. If it does no other crop of wheat that could be put in would improve the chances, for if spring wheat were sown in the early spring both crops would come on together and be a mixed crop in quality and very likely to be too thick for best results. If he waits until he sees whether the winter wheat is coming, the season will then be too late for spring wheat, and if the seed did not start in the fall at all it will be pretty sure to start as soon as the warmth comes in the spring. At least I should have faith enough to wait until it would have a chance to start before taking any action. If the seed does not start before time to put in oats it will not come unless the soil has continued in such a dry state as to prevent the germination and growth. If this dry condition does continue until it is too late to sow oats there is a pretty slim chance to get a crop with the amount of rainfall that usually comes in that district.

I should be afraid to sow any other crop on this land with that winter wheat seed lying there. I should not want to re-seed with any other grain until I felt sure what the seed already there was going to do. I have known winter wheat to make a fairly good crop when it did not start at all in the fall; but of course it may be possible that it will not ripen, but it has a fair chance to do so. I have seen fall wheat start in the fall and grow sprouts from one-eighth to one-quarter of an inch, lie through the winter in that state and then come on and do well the following spring. But, of course, we can see that even that much of a start would be an advantage in favor of earlier maturity.

My advice would be wait and see what the winter wheat does before sowing more seed of any kind. After it is seen what the fall-sown seed is going to do there is plenty of time to take action.

The second crop, if it is necessary to sow one, may be oats, barley, green feed, or flax, or it may be possible if one has stock to turn them on the fall wheat and keep it pastured down during the summer and run it over in this way for a crop the following year if it should start too late to make a crop this season. I would say, however, that it should start at once in the spring to have any chance to make a crop this year.

Will say in regard to the pasturing proposition that I have carried rye over in this way and run it clear through one summer by pasturing it enough to keep it from jointing when it had started the fall before and do not see any reason it could not be done in this case with this patch of wheat. I only mention this as a possibility, provided the occasion presents itself to do so, but not as a choice, for it would without a doubt be more profitable to get a crop without the loss of the use of the land, especially in a country where there is plenty of pasture without pasturing the wheat. This incident will serve to warn other farmers against sowing winter wheat so late as this lot was sown and in dry soil. We take chances enough when we prepare by summer

fallow or summer tilling for our winter wheat, without sowing late in the fall in dry soil. New breaking that has been well broken and well rotted and taken care of to conserve the moisture is also a fairly safe place to put winter wheat. The very best conditions should be striven for in order to reduce the danger of failure to the minimum.

Alta.

D. W. WARNER.

### Growing Maize In Alberta

That corn can be successfully grown in Alberta has been demonstrated. Thos. Rider, of Lamer-ton, north of the Red Deer river, harvested ten acres of corn last season. The grain was fully ripened and this year Mr. Rider purposes growing fifteen or twenty acres, sown from seed of last year's growth. From tests made he has found the germination quality of this seed of high percentage and well up to the standard. "For twenty-one years I grew corn across the line, but few crops equalled the one I harvested in Alberta last year," stated Mr. Rider. His corn, he claimed, grew eleven feet high, and besides was well eared. The varieties he grew were the Australian white and the yellow Terechan. Early June was the time of planting and the crop had ripened before the fall frosts came.

When asked regarding summer frosts, Mr. Rider stated that some localities might be more subject to early frosts than others, yet he was of the opinion that many localities in Alberta were well adapted, both as to soil and climate, for the growing of certain varieties of corn.

Growing corn would do away with the need of summer-fallowing and besides the summer cultivation for corn would clear the land of many noxious weeds. After a corn crop the soil is left in fine tilt, in perfect condition for the making of an excellent wheat bed. Mr. Rider is very enthusiastic over his results from growing small fruits and vegetables as well as from growing maize.

### "Why Not?"

PROFESSOR BOLLEY ON THE WEED PROBLEM

Why not compost manures to destroy weed seeds and fungi spores?

Why not handle our feeding stuffs under such proper conditions of control that the seeds of weeds and the spores of disease producing fungi may be destroyed?

Why not refuse to buy agricultural seeds containing masses of new sorts of weed seeds?

Why not treat and disinfect all seeds sown or planted?

Why not have a seed plot so as to be able to pick out any weeds or disease bearing plants, thus raising your own clean seed and not depending upon the purchase of seed that is contaminated in the elevators and warehouses and seed cleaning machinery of wholesale seed firms?

Why not rotate to give weeds a harder time and give diseases which live upon special crops and special crop refuse of the soil a chance to die out?

Why not observe and think out the habits of each weed and fungous parasite with which you come in contact and plan to side-track them by attacking the habit of growth which the pest cannot change?

Why not prevent the maturing of weeds and plant diseases upon our lands and upon the roadsides adjoining and in the waste places?

Why not seed waysides and waste places to blue-grass and white clover with which sods few weeds can compete?

Why not educate our neighbor along similar lines and, if he will not be educated, why not declare him to be a public nuisance, "menace," or whatever is necessary to please the lawyers and then make him think some of the rights of others.

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In United States Bulletin 339, the following estimate is put on the feeding value of good alfalfa hay, as compared with the other feeds there named: Alfalfa hay per ton, \$20.16; clover hay per ton, \$14.12; timothy hay per ton, \$9.80; wheat bran per ton, \$22.80; shelled corn per ton, \$20.16.