

Crops for Summer Feeding

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A variety of crops that may be grown successfully for summer feeding are at our disposal. At such times when the grass becomes short or dry, an excellent substitute may be found in oats and peas. These should be grown in a mixture in a the proportion of one bushel of peas to one and one-half or two bushels of oats. Sow in plots of an acre, the crop from which can be fed in two or three weeks. Two or three such patches will tide over the critical time. Cows must not be allowed to fall in their milk flow for the want of feed or they will never come back to their normal production during that milking period. Corn makes a splendid crop for supplementary feeding. Alfalfa is another excellent soiling crop. All of these are cheap and most bulky feeds.

Mangels and sugar beets can be grown and used for late fall or winter feeding. Many object to the growing of root crops on account of the labor they involve. Root crops, however, will repay any labor required in caring for them. They work a two fold benefit, by cleaning the land and providing a succulent and cheap food for dairy cows and young stock. From 25 to 30 tons an acre can be grown if proper care is given them. These crops as mentioned may be used for winter feeding should they not be required in the summer.

OATS AND PEAS MIXTURE

The oats and peas will make a first-class hay for this mixture, it is better to sow the peas about two weeks before the oats, then drill the oats in crosswise. By the time of cutting, when sown in this way, both the oats and peas will be at about the same stage of maturity. The proper time to cut this mixture is when the tips of the oat leaves

made into ensilage which brings us closer to summer conditions in that it is, if properly managed, almost in its natural state. When put in the silo, corn retains its succulence, which is of great importance. Corn may also be cured in the stack, in the field, or stored in the barn either in the whole condition or cut and put into the mow. Any of these methods may be followed and a cheap bulky food is the result.

The table of the composition of some of the common feed stuffs appended is worth a little study in connection with the feeds mentioned in the foregoing:

ANALYSIS OF FEED STUFFS

Name of feed.	Digestive Nutrients in 100 lbs.			
	Dry matter.	Protein	Carbohydrates	Ether extractive and crude fat
Pasture grass	20.0	2.5	10.2	0.5
Fodder corn (green)	20.7	1.0	11.4	0.4
Oats and peas (green)	16.0	1.8	7.1	0.2
Oats (green)	37.8	2.6	18.9	1.0
Red clover (green)	32.2	2.9	14.9	0.7
Alfalfa (green)	26.2	3.9	12.7	0.5
ROOTS—				
Beets, common	13.0	1.2	6.8	0.1
Mangolds	3.5	1.1	10.2	0.1
	9.1	1.1	5.4	0.1
DRY FODDERS—				
Corn fodder	57.8	2.5	24.6	1.2
Marsh hay	38.4	2.4	28.9	0.9
Prairie hay	90.	3.5	41.8	1.4
Oat hay	91.1	4.3	55.4	1.9
Red clover hay	84.7	6.0	35.8	1.7
Oat and pea hay	85.4	9.2	35.8	1.2
Alfalfa	91.6	11.0	39.6	1.2
Oat straw	90.8	1.2	36.2	0.8
Wheat straw	90.4	0.4	38.3	0.4

SOLVE THE QUESTION NOW

Now is the time to consider the feed question. Provision is made along the lines suggested

Preparing and Planting Seed Potatoes

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The preparation of the seed is one of the most important considerations in connection with the whole work of potato growing. It is here that so many fail. The disposition to use for seed purposes small potatoes which are useless for market or even for home consumption is all too common. For objections to the use of such tubers for seed purposes we have not far to go. Small potatoes are likely to possess all the weaknesses peculiar to the mother plant and as a result hasten degeneration of the variety if used from year to year. There is every evidence to prove that the use of small potatoes chosen from the bin for seed purposes has caused the "running out" of a great many, perhaps the majority of our once highly productive varieties.

Many experiments have been conducted during the past 100 years respecting the best kinds of sets to use. Our leading authorities on the subject are practically agreed that from medium to large whole potatoes, used for seed purposes, will give the larger yields, but owing to the great amount of seed required it is not considered profitable to plant whole potatoes. Taking everything into consideration best results are obtained from medium sized tubers cut lengthwise and then across, making four sets of about two ounces each, each set having about three "eyes." Potatoes cut for planting should be planted as soon as possible after cutting. An experiment conducted by Prof. Zavita at Guelph showed that the yield diminished by one-half by leaving cut potatoes uncovered for two days. If for any reason the cuts must remain uncovered for some time before planting, a coating of gypsum or sand plaster has been found to prevent the rapid evaporation of moisture from the cut surfaces and thus to preserve the yielding capacity to a great extent.

PLANTING.

In ordinary field culture, experiments go to show that the most profitable method of planting, considering the cost of seed required, is to plant in drills about 30 inches apart, dropping one set in a place, the sets to be from 12 to 14 inches apart. This method will require on the average about 25 bushels of seed an acre.

The drills are commonly opened by means of the ordinary single mould-board plow to a depth of about four inches and after the sets have been dropped are again covered with the same implement. Whenever available, however, the double mould-board plow will be found more satisfactory for this work. After covering the sets the surface should be levelled with a smoothing harrow. When planting on a large scale, the grower will find it advisable to invest in a horse planter.

CULTIVATION.

The potato field should receive careful cultivation during the growing season. Cultivation during a dry season is particularly beneficial in that it prevents rapid evaporation of the moisture and also assists in liberating the plant food which otherwise would remain in an unavailable condition. Once a week in ordinary season is not too frequent to cultivate until the vines become so large as to be injured by the passing of the cultivator. Level culture is considered the most profitable unless during very wet seasons when it is often advisable to ridge to some extent. In all cases shallow cultivation should be practised.

It is a mistake to feed a horse with much hay at noon, as the nutrients in grain are more concentrated and easier of assimilation than roughage. Hay should be assigned to the evening and morning feeds, when the animal has plenty of time to masticate and digest its food.

If a man can't get better than \$40 to \$50 returns from each cow he is not doing well—A. C. McKenzie, Oxford Co., Ont.



A Canadian Holstein Cow that Beats All former Canadian Records

Netherland Aargie De Kol has just completed a yearly milk record of 25,666 lbs., particulars of which appear on page two of this issue. This cow gave 888 lbs. of milk more than Bontje, the famous cow at the Ontario Agricultural College. She is owned by J. M. Van Patter & Sons, and was fed and cared for by Mr. Van Patter's son George, a boy 17 years of age. Eight cows that have been under test in the same herd during the past year have averaged over 14,500 lbs. of milk, and three of these started as 2-year-old heifers.

are turning yellow. The crop will then have taken up about all the nutriment from the soil and it will be in the most nutritious condition. If the crop is not lodged, which is as it should be, it may be cut with the binder. When bound it is easier to handle and it takes less storage room. Make the sheaves small and tie loosely so they may cure properly. Under ordinary conditions, this crop should produce about three tons to the acre. It is one of the best crops for milk production as it contains a great amount of protein, being richer than red clover.

Corn is perhaps one of our greatest crops. It will produce from 15 to 20 tons a year. It can be

the feed question will be solved. Dairying in Manitoba is being overlooked by many on account of the prairies being broken up and the natural pasturage thus having disappeared to a large extent. Where these other feeds are provided, dairying will not only be continued but it will be carried on with renewed vigor and with greater pleasure and profit than heretofore. The native grass and hay crop has of late years been of considerable worry and expense because of scarcity and the distance from supply. A great deal of time has been lost in travelling to and from supplies and many hardships have been endured in obtaining them.

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