

Soiling Crops for Milch Cows.

The advantage of having a few acres of some kind of crop, from which to cut fodder, to be fed out in a green succulent state to the cows giving milk during the season of the year when the pastures have become nearly bare from the combined causes of a dry atmosphere and the close grazing of stock, are as yet very little thought of or understood by our farmers. From the end of haying and harvest, until the cool fall rains set in, is the time at which milch cows will give the largest quantity and best quality of milk either for cheese or butter making, and to allow them just in the nick of their very best time to fall off in their yield of milk, for want of a little extra feeding, beyond what they can then get on the browned-up pastures, is a very poor policy indeed. For let it be remembered that once the yield of milk falls off, it cannot again be recovered during that season. Many will doubtless consider that the extra expense of cutting and carrying the fodder to the yard, which is the proper place to serve the feed, will be too great at a busy season; but the fodder can be grown near by, and a good smart boy can easily cut, and convey in a wheelbarrow or cart to the byres, twice a day, enough fodder for ten or fifteen cows, without expending more than four hours' work at it. One of the best crops for this purpose is Indian corn, drilled in rows just wide enough apart to enable the land to be kept clean and well tilled with a cultivator or horse-hoe. The seeds are dropped about six inches apart, in a light furrow made by the plough, and covered by harrowing the way of the furrows. Sow a succession of rows from the end of May to the beginning of July. The first sown will be ready to cut by the time the drought begins, and the last sown will be ready to use early in September before frosts come, and what is then left may be cut and cured for late fall use.

It is astonishing how large an amount of green fodder for soiling can be obtained from an acre of Indian corn, drilled in under this plan, especially if the land is rich and well tilled. The corn is fit to use as soon as it is three feet high, and continues to be green and succulent till after flowering, for when closely grown in this way, the ears are small, and do not draw the juices out of the plant to any great extent. Nor is the crop an exhausting one to the soil.

Besides corn, other crops can be grown for the purpose of cutting for fodder, such as peas, oats, rye and tares, but, of course, will not remain green so long, as, when the seed forms, they quickly ripen, and their stalks become dry. A large armful of fodder twice a day, morning and evening, to each cow, will, together with what grass can be had on the pasture, be sufficient to keep up an abundant flow of milk through the dry season, until the fall rains have again recuperated the grass fields.

Milk and Milk Testers.

In reply to the enquiries—How many pounds of milk will it take to make a pound of cheese—what are the best instruments for testing the quality of milk, etc.? N. A. Willard, Esq., answers as follows in Moore's *Rural New Yorker*:

Milk varies in quality at different seasons on account of food of the cows, length of time from the period of calving, and from various other circumstances affecting the cows.

Toward the close of the season, when cows begin to fall off in milk, it is richer and will make considerably more cheese than the same quantity yielded by them in June. When milk is to be purchased for cheese-making, the purchaser should fix a price for the whole season's milk, or else make two prices, one for the summer and the other for the fall milk.

At the New York factories ten pounds of milk are usually taken as an average during the season for one pound of cured (marketable) cheese. This is considered a safe estimate, though some factories occasionally overrun this quantity, while many others report a pound of cured cheese from nine and a half pounds, or less, of milk as their average.

In New York the milk is not generally purchased by the proprietors of factories, but is made up into cheese for patrons at a fixed price per pound. The system, therefore, of weighing the milk at the factory is often very loose. Manufacturers desiring to make a favourable record, not unfrequently give light weights, taking a few pounds every day from each patron for the purpose of making it appear that a large yield of cheese is produced from the milk. The competition among factories and manufacturers fosters this kind of deception, and, although patrons may not lose anything from it pecuniarily, since all of the cheese made from the milk belongs to them, still the practice is an unwarranted deception, and serves to cover up wastefulness and want of skill in manufacturing, besides throwing a doubt as to the accuracy of reports when genuine weights have been given.

In purchasing milk, we should advise, then, that no less weight than ten pounds of milk be taken as an average for one of cured cheese, and it will be well for the purchaser to keep a full record in his books of all milk deliveries, weighing the cheese as it comes from the press, and marking upon it the weight and date of manufacture. When the cheese is marketed, its weight and the quantity of milk required for its manufacture will keep him advised as to his operations.

The instruments generally in use for testing milk consist of two equal glass jars or cream gauges, one per cent. glass, and a lactometer. The cream gauges are graduated so as to determine the quantity of cream that may rise on any specimen of milk. The lactometer, when used in connection with the cream gauges, will determine pretty accurately whether milk has been diluted, unless it has been tampered with in other respects to alter its specific gravity.

Horticulture.

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Fruit Growers' Association of Ontario.

At a recent meeting of the Fruit Growers' Association a resolution was unanimously passed that the President and Secretary should be instructed to prepare a prospectus of the objects contemplated by the Society, for gratuitous distribution among the members and others.

In pursuance of this appointment, the following synopsis is respectfully submitted to the consideration of our Provincial fruit growers.

Article 11 of the Constitution comprises the following summary:—"Its objects shall be the advancement of the SCIENCE and ART of fruit culture, by holding meetings for the exhibition of fruit and for the discussion of all questions relative to fruit culture; by collecting, arranging, and disseminating useful information, and by such other means as may from time to time seem advisable."

A wide field is thus opened up to us by the framers of our constitution—room enough on the one hand for the discussion of abstract and speculative principles, and on the other, verge for the most acute, or it may be, the most prosy performances in practical gardening.

The aim and ambition of our Fruit Growers' Association is, directly and indirectly, to lead the votaries of horticulture to the study of vegetable physiology. The highest delights of horticulture are to be derived from a knowledge of the growth of the different species of fruits, and the functions of the various parts of plants; of the principles that govern and regulate growth and maturity, the formation of wood and the production of fruit.

Meteorology, too, looms up as a necessary adjunct to the success of the gardener. Pomologists and fruit-culturists in the United States fully realize the importance of this branch of science as materially modifying the circumstances of weather,—heat and cold, drought and moisture—which affect the labours of the horticulturist. The philosophical discussions on this subject in horticultural assemblies or conventions in the United States are worthy of our imitation. It may not perhaps be amiss to hint to our members, that a free discussion on the benefits of scientific study, whether of chemistry, botany, or meteorology, might not be out of place alongside of our animated assertions about "pear blight," "frozen sap," or "fungous growth." What profitable discussions might arise from the simple but prevalent principles of light, moisture, heat, or its negation, cold. How