

Feeds That Satisfy the Dairy Cow*

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A Discussion of the Cow's Appetite and the Selection of Home Grown Crops that will Satisfy It. Methods of Seeding and Rotation Suggested

THE dairy farmer, to make a success of his business, must be prepared to supply his cows in milk with as large quantities of the right kind of feed as they can be induced to consume. This, of course, refers to the treatment he should give his cattle in summer as well as in winter; and in spring and in autumn the same general rule will apply.

To induce cattle to consume liberal quantities of feed necessitates catering to their tastes or likes; that is to say, the first consideration in producing crops for dairy cattle should be the ensuring of a high degree of palatability in the

that peculiar condition of a forage or a feed which is observable when the crop from which it has been prepared has been cut at the right time, cured in the best way, housed under the most favorable conditions, and preserved in the best shape possible. Quality in the ration is a feature too frequently lost sight of, a feature quite frequently entirely ignored by the average dairy farmer, but nevertheless a feature of exceeding great importance and of very high value where

it is desired to get the best out of the individual or the herd.

Palatability is undoubtedly the most important characteristic to be provided for in producing crops for dairy cattle. But a feature not to be overlooked, and in fact the feature which has most commonly been dwelt upon by men dealing with this subject, is the suitability of the feed for the end in view. Suitability in this connection has been considered to mean that quality in the ration which makes it fill up and satisfy the craving of the appetite for something to distend the digestive organs, and, besides this, suitability in the way of composition for the attaining of the end in view, namely milk production.

Producing large quantities of milk means, as everyone knows, the utilization of large quantities of protein, that is, the flesh-forming part of foods. Fortunately, our chemists and experience have shown us what foods possess this peculiarity and which of them are likely to please the dairy cow and enable her to give good results at the pail.

COMMON FOODS SUITABLE

Among the feeds that we find most suitable for milk production in Ontario and that come



A Source of Palatability

Here we may see Mr. Simpson Hanna in the corn field of R. E. Hicks, York Co., Ont., the President of the Canadian Holstein-Friesian Breeders' Association. In the adjoining article Mr. J. H. Gridale strongly advocates corn, because of its nutritive value and palatability.

—Photo by an editor of Farm and Dairy.

the nearest to complying with the conditions of success in feeding, as indicated above, are corn ensilage, mangels, turnips, alfalfa, red clover, alsike, pea and oat hay, brome grass hay, blue grass hay and mixed hay, while for concentrates a mixture of oats, peas and barley, oats and peas, or of peas alone or oats alone, barley in small quantities, corn, oil cake meal, cotton seed meal, gluten meal, wheat bran, wheat shorts, or middlings are about the best that can be fed.

To the concentrates, with the exception of the by-products and mill feeds mentioned, we need pay little attention, since they are grown and grown fairly cheaply on every farm. The question of the economical production of the roughage or coarse part of the forage is, however, an exceedingly important one, and a few ideas on the methods of production best suited to Eastern Ontario conditions are submitted.

To begin with, "Abundance" should be the watchword. Any shortage in the supply of roughage is very much more serious than a similar condition where concentrates are considered;

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"Just About as Good as Bran and Much Cheaper"

In three years the yields from this field were 5.44 and 32 tons. The gradual decrease in yield was due more to the character of the season than to decreasing vigor of the crop. This alfalfa tested 11 per cent digestible protein. Bran tests 23 per cent. When difference in price is considered alfalfa is surely well worth repeated trials until success in growing it is attained.

resultant forage. As aids to palatability, succulence, variety and quality in the ration take first rank.

Succulence can, as we all know, be imparted in some degree to dry forage by sprinkling it with water, either pure or flavored, as with feed molasses, and allow it to lie softening for some time before feeding. The only really satisfactory method of ensuring succulence in the ration, however, is the growing of succulent feeds and storing them as such. In any case, succulence is the almost absolute condition of success in feeding dairy cattle.

Variety, like succulence, is undoubtedly a material aid to palatability, hence it is important that the dairy farmer do all he can to provide some variety in the feeds he stores for his cows. Cattle have a somewhat different idea of what constitutes variety in food than have men. Men as a rule like their rations to vary day by day; cattle, however, like the same ration continuously, but like it to include as many different kinds of food as are available, and to have them all in the same proportion each day.

To illustrate, a ration including both red clover and alfalfa hay is likely to give better results than either the one or the other fed alone. A ration including both corn ensilage and mangels will usually prove more satisfactory than the ration whose chief constituent is exclusively one or the other of these two probably equally valuable succulent feeds.

Quality is another peculiarity of the feeds grown. These notes are a summary of an address by Mr. Gridale, before a convention of Eastern Ontario dairymen. They were so thoroughly appreciated by the farmers that we reproduce them in full for the benefit of our folks.



This Crop Should Occupy an Important Place in the Dairy Farm Rotation
Well-cured clover hay is palatable. It is so rich in protein that it is almost a balanced ration in itself. Although not so rich as alfalfa it works in better where a short rotation must be followed. This illustration is from a photograph taken on the farm of a man who appreciates the merits of clover.—Mr. R. Young, Huron Co., Ont.