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Livestock and Dairy Problems

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Testing Cream Correctly

A READER who is sending cream to a creamery says: "The cream tests from 39 to 40 per cent butterfat, and they pay 38 cents a pound for butterfat. We can take four pounds of this 39 per cent cream, churn it, and get 2½ pounds of butter. Tell me if he is testing the cream right. I do not understand it."

Cream weighing four pounds and containing 39 per cent butterfat contains 1.56 pounds of butterfat. If to this be added the overrun, or one-sixth, or in this case .26 pound, we have 1.82 pounds as the weight of standard butter which four pounds of 39 per cent cream should make. This is nearly **⅓ pound, or 0.43** pound, less than the 2¼ pounds of butter which our reader says he can make from four pounds of cream.

The difference might come from an incorrect butterfat test. That is, it might come from the cream containing more than 39 per cent butterfat. While creamery patrons are sometimes robbed by inaccurate and dishonest butterfat testing, it is also possible to account for this **0.43** pounds of butter, in excess of what should be made from this quantity of 39 per cent cream, by a smaller per cent of butterfat in the butter made than is required by the standard. For instance, if 2¼ pounds of butter is made from 4 pounds of 39 per cent cream or 1.56 pounds of butterfat, the butter can contain only about 70 per cent of butterfat, while it should contain 80 to 85 per cent of butterfat. When the butter is more than 22 per cent greater than the amount of butterfat, there is either an error in the cream test, or there is too much water, salt or curd, one or all, included in the butter, and the butter becomes inferior or illegal.

If cream tests are inaccurate or dishonest, the producers must organize a method or system of checking the tests as the only means of protecting themselves.

Green Wheat and Rye Will Not Hurt Hogs

A READER writes: "We have had several people tell us that green wheat would kill hogs. I have several acres of rye and wheat, mixed half and half, which I want to use for a hog pasture."

This perennial error crops out regularly every season. It is not true, and thousands know it is not true, yet others repeat it regularly in spite of all the experience to the contrary.

Perhaps someone put hogs unaccustomed to green feed on green rye, or a sow suckling young pigs has been suddenly turned on green rye or wheat, and some or all of them have suffered from scouring or too loose bowels. If the sow is a good milker and the pigs young, they may get too much milk at first, due to the increased flow from the addition of green feed. But if at first the hogs are turned on the green feed for only an hour each day for two or three days they may then be left on it to eat all they want and it will not only not hurt them, but will be good for them, besides saving one-half to two-thirds the grain feed.

How Much Protein in the Dairy Ration?

A READER asks if "a ready-mixed dairy feed containing 18 to 24 per cent protein is not too rich in protein?"

The concentrates or grains must be selected to fit the roughage. Also the per cent of protein may be higher when the cow is not to be fed a full ration, such as is commonly done when the cows are on good pasture.

If the roughage contains a fair allowance of legume hay, or the cow is on clover pasture, then a concentrate containing 20 per cent of protein is not required, and if used should have mixed with it some additional concentrate, rich in carbohydrates, like corn, corn bran, molasses, etc.

But if the cows are getting silage and grass hay, or silage, or grass hay, or cottonseed hulls alone, then a concentrate containing 20 per cent protein might not be too rich in protein.

We are often asked to make a balanced ration out of a given selection of concentrates, and the kind of roughage is not stated. To make up a balanced ration for a dairy cow, it is necessary to know the roughage that is to be used, as well as the concentrates.

A cow on pasture that is getting only a part of a full ration of concentrates may usually use a concentrate mixture containing 20 per cent of protein to advantage. In fact, when cottonseed meal was cheap, many dairymen got economical results feeding cottonseed meal which contained 36 to 40 per cent of protein to dairy cows on pasture.

Bitter Weed Flavor in Milk

RECENTLY we discussed the wild onion flavor in milk, and now a reader wants to know how to "take the bitter taste out of milk," when the cows eat bitter weed.

We believe this is even more difficult than taking the onion flavor out of milk, which is saying that it is not practicable to do so. The bitter taste may be **kept** out of the milk but not **taken** out.

If the cows are taken out of the wild onion pasture three or four hours before milking, the onion flavor will not be present, but so far as we know the bitter flavor from eating bitter weed will remain with the cow much longer.

The only way we know to handle the bitter weed problem is to eradicate the bitter weed, or keep the cows out of a pasture infested with bitter weed.

Many plants have been called "bitter weed" but the one popularly known by that name in the South is now widely scattered throughout nearly the entire South. It has a yellow composite flower and the plant is from 4 to 16 inches high. The scientific name is "Helenium tenuifolium." It is called "sweet weed" and has like some of the other "sweet weeds" been reported as poisoning stock, but this is almost certainly not true as regards our Southern "bitter weed," for stock eat and thrive on it.

Twenty years ago it was not very common in the Carolinas, but even 30 years ago it had taken the pastures of the Mississippi Valley south. We notice that it is much more common all over the South in recent years. It is a very great pest, making the milk of cows grazing in a bitter weed infested pasture unfit for use, because of the intensely bitter taste. This is especially true early in the season when the young bitter weed plants are tender and other pasture plants not abundant. But bitter weed is not nearly so difficult to suppress in a pasture as wild onions. Bitter weed is seldom troublesome in pastures on good land, or where the pasture is good and not grazed too closely. If there is a good stand or sod of grass and it grows well and is not too closely grazed, bitter weed seldom gives much trouble. The pastures where bitter weed is most troublesome are the old, bare, washed, and depleted fields, which we call pastures by courtesy. If the pasture can be mowed, mowing closely twice a year, if done at the right time —first blooms—will greatly reduce the bitter weed. It will be necessary to go over the pasture and pull up or cut down the plants left by the mower.

In the late fall bitter weed will bloom and probably make seed on plants not more than three or four inches high, and this adds to the difficulty of eradicating or suppressing it by mowing. Cultivating the pasture, growing legumes to increase the fertility and then putting in pasture will also eradicate the bitter weed. Where the pasture cannot be mowed or cultivated, the only method of eradicating is by hand pulling or cutting and this is slow, tedious, expensive, and often impracticable. Good land, a complete stand of pasture plants and not too close grazing is the best preventive. In such a case, just a little attention to removing the first plants that appear will keep the bitter weed out.

Pointers in Buying Dairy Cattle

"THE man does not live who can pick the good cows from the poor ones without ever making a mistake," says W. W. Swett, of the Missouri College of Agriculture. "Even the best judges sometimes make a mistake. But there are certain points about the dairy cow that are almost always associated with high production."

The udder should be deep, wide and long with good attachments. It should be evenly developed, level on the floor and equipped with teats of good and uniform size, symmetrically placed. It should also be soft and pliable, indicating that it consists of secreting cells rather than flesh.

A good set of milk veins indicate that the udder is well supplied with blood. Long, crooked veins entering large wells or openings through the body wall are usually associated with high production.

A cow cannot be a maximum and continuous producer unless she has a strong constitution. Vitality and strength of constitution are indicated by broad, open nostrils, and a chest which is deep and broad.

Feed capacity is essential. In order to produce heavily a cow must consume large quantities of feed and water. A barrel which is long, broad, and deep indicates a large capacity and good production. A large cow nearly always has the advantage in production, provided she is not deficient in other points.

Alertness in temperament is an asset, and a sluggish cow is seldom a high producer. Dairy temperament includes those characteristics which indicate that the cow's feed is used for the production of milk rather than for body fat. Angularity, prominent points, lack of heaviness and flesh, and the presence of the triple wedges are good indications.

Quality refers to the handling or pliability of the hide, the refinement of bone, and the character of the animal, which cannot be described but which have to be seen to be appreciated.—Missouri Extension Farm News.

VETERINARY PROBLEMS

Scours in Calves

OUR readers frequently write for treatment for scours in young calves, ranging all the way from a few days old to several months.

As usual, the prevention of this trouble is much more important than its treatment. First, because if it is prevented, as it may be, there is no need for treatment, and second, it is much easier to prevent it than to cure it, and third, the calf that has never had scours is likely to do much better than one that has been cured. Moreover, scours causes the death of many calves and renders others of little or no value. What is known as "white scours" is due to infection, usually obtained through the digestive tract or the navel. It is seen in young calves. It is closely associated with abortion, retained afterbirth, etc.

The first milk of the cow is beneficial in starting the digestive organs of the calf to working properly. But if the teats are soiled infection may occur. Also if the bedding is soiled and the stable a dark, damp, unclean place infection may take place through the navel.

Most cases of scours reported to us are in older calves. The infectious white scours usually kills too promptly to give time for consulting us. The cases occurring in older calves are due most commonly to the feeding of too much milk, to unclean milk or the feeding of the milk in unclean vessels and to irregular feeding. The milk should be of about the same temperature each time, 90 to 100 degrees. It should be fresh milk that is neither sour nor old.

Overfeeding and the feeding out of unclean vessels are the more common causes. The treatment is, therefore, to greatly reduce the feed. Cut out the milk entirely for one or two feeds and then give one-fourth or less of the usual amount. The milk is not being digested and is doing the calf harm instead of good when diarrhea is present. It is, therefore, better to have the milk outside of the calf. It is always a safe plan to starve a calf that has scours for a day or two at least. And, of course, the small amount of milk given should be fresh, clean and warm, and fed from a clean vessel.

If the cutting down of the feed does not check the scouring, perhaps it is best to start out with a physic. The dose is from two to six or eight tablespoonfuls of castor oil according to the age of the calf. A half-teaspoonful or 30 to 40 drops of turpentine may be put in the oil. A mixture of equal parts of powdered chalk and subnitrate of bismuth, in one teaspoonful dose, three times a day, will usually result in relief if the feed has been properly reduced and the sour, undigested milk removed by the purgative of castor oil. A mixture sometimes given, instead of the chalk and subnitrate of bismuth, is:

Bicarbonate of soda....8 parts by weight
Subnitrate of bismuth...4 parts by weight
Salol .....2 parts by weight

The dose of this mixture is one teaspoonful three times a day.

Blind Heifer

A READER had difficulty in driving a heifer a distance of two miles, it taking four hours to drive her that distance. When she had been driven about a mile from the starting point she became blind and has been blind since—three days.

The excitement, overheating and violent exercise are probably responsible for the blindness. Without knowing more about the actual condition of the eyes in this case we cannot risk a definite opinion as to whether she will regain her sight. If the blindness is due to the rupture of a blood vessel in the brain or elsewhere, the clot may or may not be absorbed so as to restore sight. There may be such a condition of the nerves that sight will not be restored, while on the other hand, if due to a less serious condition, the heifer may regain her sight in the course of time.

Without knowing the actual condition causing the blindness, we do not feel that it is worth while or even safe to prescribe treatment or medicines, except that she be kept quiet and feed and water be placed before her, for until she becomes accustomed to being blind she will not hunt for either, unless it is easy for her to get.

Time and the natural healing powers of her own body will be the best doctor in this case.

This case serves to call attention to the necessity of avoiding extreme exercise and exciting of animals. This applies more especially to hogs in hot weather.