

# The Dangers of Fodder Beet for Cattle and Sheep



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**F**ODDER beet is a valuable crop for pigs, sheep, and cattle in winter, but when fed to cattle in excessive quantities it has caused digestive upsets and even death. In one of several outbreaks of beet poisoning in cattle in New Zealand 22 animals died and several others showed a marked digestive disturbance. There have been no field reports of poisoning in either sheep or pigs, but poisoning has been produced at Ruakura in sheep by dosing them with beet juice. Information gained from these field outbreaks and sheep dosing trials has enabled recommendations to be made on the variety and quantity of fodder beet which should be fed to sheep and cattle.

**T**HE September 1955 issue of the "Journal" contained two informative articles on fodder beet, one, by A. Longwill, discussing fodder beet for pig feeding, and the other, by J. H. Claridge, describing the characteristics of the fodder beet plant as they affect its use for stock.

All fodder beets are a cross between mangels and sugar beets; mangels are low in sugar and dry matter and sugar beets are high in both. The amount of these substances in fodder beet varies considerably between these two extremes according to the varieties and the district in which they are grown.

As the sugar content and dry matter are directly related to one another, only the dry matter level need be considered. Though the dry matter varies with the district, all varieties vary to the same degree, so that all beets can be grouped according to the amount of dry matter irrespective of where they are grown. The sugar beets Klein, Maribo P, Hunsballe, and Hinderupgaard are very high in dry matter, and of the fodder beets, Pajbjerg Rex and Rex are high and Red Otofte and Korsroe are moderate.

## Cause of Digestive Trouble

The tops of fodder beet contain balanced amounts of protein and

▲ Fodder beet is a very valuable winter crop for both cattle and sheep, and digestive upsets or poisoning will not occur if the crop is managed correctly.

carbohydrate and are suitable feed for growing or milking animals; the roots, however, where most of the dry matter is concentrated in the form of easily digestible carbohydrate, mainly sugar, are low in protein and should be supplemented by pasture. It is this carbohydrate which leads to digestive upsets in ruminants by interfering with the bacteria which aid digestion in the paunch. These digestive upsets will happen only when cattle are allowed to eat too much beet, particularly when they are first put on to it.

It is therefore imperative that fodder beets should be strictly rationed to cattle and sheep and that the animals should be introduced to them gradually. Sudden access to a full ration of roots or gorging can cause the animals to lose appetite, with marked loss of production in dairy stock. If the herd shows any sign of going off feed, it should be immediately removed from the crop and kept off it for 2 to 3 weeks. It may then be re-introduced to the crop in a smaller ration.

Gorging can also result in death. In these cases the animals suffer not only from severe indigestion, but in the paunch a toxin is formed which,