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KANSAS STATE AGRICULTURAL COLLEGE

DEPARTMENT OF MILLING INDUSTRY
FEED CONTROL OFFICE

SAFEGUARDING FEEDERS OF COTTONSEED PRODUCTS

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Many Kansas feeders have come to depend on cottonseed cake and meal as their principal concentrated feed during the winter months. These by-products from the manufacture of cottonseed oil have proved to be particularly suitable to Kansas conditions. Some of the other by-products have been used but not to the same extent as the cake and meal. The high price and scarcity of these products during the past year, owing in part to war conditions, has proved a very real hardship in many instances. In some cases this was aggravated by the fact that the cottonseed cake and meal shipped into this state were found to be deficient in protein or short in weight, or both.

Formerly very few purchasers took the trouble to investigate whether the feed delivered was up to contract. More recently many consumers have been checking the weights

and sending in samples for analysis, owing to the fact that the price of cottonseed products is high, and deficiencies have been found to be quite frequent.

In order to protect themselves, the consumers of cottonseed by-product feeds should, immediately upon receipt of a shipment, check the weight and send a representative sample to a reliable chemist to be analyzed for protein. If a deficiency in either weight or protein is found, the matter should be reported at once to the Feed Control Office at Manhattan, Kan. Such cooperation will

First: Assist the consumer in getting a rebate.

Second: Enable the Feed Control Office to prosecute the guilty parties when the law is violated.

In this way purchasers of cottonseed by-products may not only secure the rebate due them, but the shipping of these products into Kansas when deficient in either quality or weight will be made so unprofitable that the practice will be discouraged.

When the purchaser desires the Feed Control Office to make chemical analysis of samples to determine the percent of protein, fat, or fiber, this work will be done at the following rates: Determining protein, \$2; fat, \$2, crude fiber, \$4; or all three, \$5. This office does not guarantee that the analysis made of samples submitted by an individual or firm is representative of the product. It merely guarantees that the composition of the sample submitted is as reported. Those taking samples for analysis should be extremely careful to secure a sample that is representative of the entire lot.

In making up samples for analysis, small portions should be taken from a number of different sacks, 10 percent of shipment where practicable. These small portions should be thoroughly mixed and an average sample consisting of at least 1 pound forwarded for analysis. Full information as follows should accompany each sample:

1. Name and address of the person sending in sample.
2. Name and address of seller, if sold by other than the person sending in sample.
3. Name and address of the manufacturer if different from that of the seller.
4. Sample of label, if any. If there is no label that fact should be stated.
5. Specify whether sample is to be analyzed for protein only, or for protein, fat, and fiber.

If a marked deficiency in protein or weight is reported or the analysis of a sample sent in by an individual or firm shows

a marked deficiency, the Feed Control Office will endeavor to have official samples for analysis taken by an inspector or have an inspector check the weight, as the case may be. A report of the results of the analysis of the official samples taken by the inspector or of the weighing by him will be furnished to interested parties free of charge. Such an official report is a much better basis upon which to ask for a rebate than a report from an unofficial source.

METHOD OF CALCULATING REBATE FOR DEFICIENT PROTEIN

To find the rebate due, divide the cost per ton by the percent guaranteed, and multiply that result by the percent deficient. Then multiply this result by the number of tons purchased.

Illustration: If a shipment containing 20 tons of cottonseed meal costing \$38 per ton is purchased under a guarantee of 43 percent protein, and is found to contain but 37.6 percent protein, how much rebate is due?

$$\begin{aligned} \$38.00 \div 43 &= \$0.883 \quad (\text{Cost per ton of 1\% protein.}) \\ 43 - 37.6 &= 5.4 \quad (\text{Percent of protein deficient.}) \\ 5.4 \times .883 &= \$4.77 \quad (\text{Cost per ton of 5.4\% protein.}) \\ 20 \times \$4.77 &= \$95.40 \quad (\text{Amount of rebate due.}) \end{aligned}$$

(Note. — This method of calculating rebate has been modified by the U.S. Food Administration rule, which at this date, November 1, 1918, makes an arbitrary rebate of \$1.40 per unit of protein.)

Kansas Law specifically requires each sack of this feed sold or exchanged within the state to be 100 pounds net, unless a special contract is made for each individual sale. Many of the cottonseed mills ship into this state feed weighing only 99 pounds-net per sack. If this material is resold or exchanged in this state without a special contract for each sale it renders the person or firm making the sale or exchange liable to prosecution.

The use of a sliding or double scale guarantee, such as protein 41 to 43 percent is misleading, for the reason that it tends to convey the impression that there is over 41 percent of protein in the feed, whereas, there is only 41 percent guaranteed; therefore, the sale or exchange in this state of feed bearing a double or sliding scale is forbidden. The sale or exchange of feed bearing such a misleading label will render the person or firm making the sale liable to prosecution.

As a further protection purchasers shipping feed into Kansas are advised to put into each contract for feed the clause, "The feed delivered on this contract must comply with Kansas Law."

DEFINITIONS OF COTTONSEED BY-PRODUCT FEEDS

COTTONSEED CAKE is a product of cottonseed only. It is composed principally of the kernels and such portion of the hulls as is necessary in the manufacture of oil. It may be firm in texture but must not be flinty. Nothing shall be recognized as cottonseed cake, however, that does not conform to the foregoing definition and that is not sweet in odor, reasonably bright in color, or does not contain at least 36 percent of protein.

COTTONSEED MEAL is cottonseed cake, finely ground but not necessarily bolted. It must conform in all other respects to the definition of cottonseed cake.

SUPERIOR COTTONSEED CAKE must be perfectly sound, friable in texture, sweet in odor, bright yellow, free from excess lint, and not burnt in cooking. It must contain not less than 43 percent of protein.

SUPERIOR COTTONSEED MEAL is superior cottonseed cake, finely ground, but not necessarily bolted.

CHOICE COTTONSEED CAKE must be perfectly sound, friable in texture, sweet in odor, bright yellow, free from excess lint, but not burnt in cooking. It must contain not less than 41 percent of protein.

CHOICE COTTONSEED MEAL is choice cottonseed cake finely ground, but not necessarily bolted.

PRIME COTTONSEED CAKE must be sound in quality, yellowish, not brown or red. It must be sweet in odor. It may be firm in texture but must not be flinty. It must be free from excess of lint and contain at least 38.6 percent of protein.

PRIME COTTONSEED MEAL is prime cottonseed cake, finely ground, but not necessarily bolted.

SOUND COTTONSEED CAKE must be sound in quality, of good color, not brown or red. It must be sweet in odor. It may be firm in texture but must not be flinty. It must be free from excess of lint and contain at least 36 percent of protein.

SOUND COTTONSEED MEAL is sound cottonseed cake finely ground, but not necessarily bolted.

COTTONSEED FEED is a mixture of cottonseed meal and cottonseed hulls, containing less than 36 percent of protein.

COLD PRESSED COTTONSEED CAKE is the product resulting from subjecting the whole undecorticated cottonseed to the cold pressure process for the extraction of oil, and includes the entire cottonseed less the oil extracted. It should contain not less than 25 percent protein.