

Kentucky Agricultural Experiment Station

University of Kentucky

COMMERCIAL FEEDS IN KENTUCKY IN 1938

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The work under the feed law in 1938 was very satisfactory. At no time since the service was established has it been more in demand than during this period. The manufacturers have shown a fine spirit of cooperation and feeds sold in the State are generally of a high standard. Feeders are better informed about feeds and feeding, and are looking to this Department for help and guidance more than ever before. Frequently feeders and manufacturers come to the department together to discuss questions of mutual interest.

During the year, 1538 samples of feeds were analyzed chemically and microscopically and the results sent direct to those concerned. Of this number, 1176 were official samples collected by the inspectors for check analysis against manufacturers' guaranties. The remaining 362 samples were analyzed for investigational work of the department, for other departments of the Station, cooperative projects and for feeders and dealers. The results of analyses of the official samples show that

the feeds sold in Kentucky are of a high standard and generally up to guaranties of the manufacturers.

HOME-GROWN FEEDS

The amount of commercial feeds manufactured in Kentucky is comparatively small in relation to the amount consumed in the State. It is estimated that 65 percent or more of the mixed feeds consumed are imported and 35 percent or less are made in the State. Also, the amount of home-grown materials that enter into manufactured feeds in Kentucky is small. Not only is this true, but much grain and hay are imported. The tendency now is to grow more and better feed crops, as is shown by the increased interest of Kentucky farmers and feeders.

The Department is continually being called upon to analyze feed materials such as grains and hays grown on Kentucky farms, to help the growers and feeders to improve these feed materials. Often these analyses are desired for comparison with similar materials grown in other states. Requests for analyses of legumes and grasses are constantly being made. The results of analyses of such samples, including some of the mineral constituents, will be published later in a bulletin.

Race horse feeders are particularly interested in getting the best oats obtainable for their horses. They are constantly seeking information on kind and quality of oats they are buying, as to weight, soundness, cleanness and freedom from mold or any condition that would impair their value as a feed. Inquiries are frequent also as to the value of hybrid corn as a feed, and a number of requests for analyses have been made. Complaints are made more against its hardness and injurious effect on the mouth and teeth than its nutritive value. However, the hardness may affect the digestibility to some extent because of lack of proper mastication and slower action of the juices of the stomach on the hard particles of the corn. The average analysis of the hybrid corn was about the same as that of ordinary corn.

LOW FAT CONTENT OF COMMERCIAL FEEDS

The fat content was found to be low in an unusually large number of feed materials and special-purpose mixed feeds, this

year. Investigation reveals that the main reason for this deficiency is the treatment given the raw materials, by manufacturers, to obtain products rich in fat, for other uses. Often the reason for the deficiency is laid to seasonal conditions but this is not true in most cases. In the wheat by-product feeds, the cause was traced mostly to the practice of degerming the wheat to obtain the germ as a source of vitamin E. The germ is rich in fat and vitamin E and when the wheat is reduced in this manner the wheat feeds lose these two important feed factors. When wheat shorts or middlings and wheat mixed feeds are reduced in these two important feed nutrients, their importance as feeds is correspondingly lowered. A feeder accustomed to use wheat feeds in his rations is put to a disadvantage by this deficiency, since it must be compensated from some other source. The palatability of these feeds and other feeds so reduced is also greatly lowered. Mills are equipped for degerming the wheat, and the germ is sold at high prices, depending on the purity of the product, ranging from \$60.00 to \$100.00 a ton, the average being about \$80.00 a ton.

A large amount of inferior wheat has been "worked off" in various forms in all classes of feeds during the year without notice. It has been used in various proportions, ground and mixed with shorts, middlings and wheat mixed feed, and sold as such. These feeds were greatly reduced in feed value by its use. In mixed feeds, ground wheat was often substituted for wheat shorts, wheat middlings and other wheat by-products, which diminished the percentage of nutrients of these feeds in proportion to the amount used, as evidenced by the low analyses of the feeds.

Corn is being degermed in some sections and the by-products merchandized as straight corn by-product feeds. These feeds are below standard in both protein and fat and like other degermed feeds are not only poor feeds but are unpalatable and stock do not relish them.

Hominy feed is another product that has been running below standard in both protein and fat, altho most of the hominy feed coming into the State in straight form is of high quality.

The low-grade hominy feed is generally used by mixers in their cheap and competitive feeds and their poor quality is reflected in the results of the analyses of these feeds, especially in the fat content.

Soybean oil meal has been found to be a good protein supplement feed material. However, the solvent soybean oil meal is very low in fat content, dry in texture and when it forms an appreciable part of a feed ration, the fat content is often found below that necessary in feeds for the best production of animals and poultry.

Feeds containing appreciable amounts of wheat products made of degermed wheat, poor quality hominy feed or by-products of degermed corn, solvent soybean oil meal and similar products, especially when fillers are a part of the mixture, are usually low in fat and vitamins, and unbalanced. Such feeds are not only uneconomical in production but impair the reproduction of animals and poultry as well.

FEEDS SUSPECTED OF POISONING STOCK

During the year forty samples of various kinds of feed suspected of poisoning stock were sent to the department for examination. Seldom was anything told about attendant conditions. The usual statement was merely that the feed was fed to some kind of livestock which later became ill or died, so that it was necessary to get more information before the problem could be treated intelligently. Hundreds of such samples have been submitted to the department in the past few years.

In all forty cases the feed was in good condition, sound, free from off-odors and usually of good quality. In no instance did the chemical tests reveal any poison. The percentages of salt and other ingredients met the guaranties. Many of the samples were fed to chicks or rats as the sole diet. All experimental animals receiving the feeds were in normal, healthy condition at the end of the feeding period of seven days.

In all cases of suspected poison, the feed was subjected to microscopical analysis and often to chemical tests for specific poisons. This requires care and considerable time, as legal pro-

cedure is usually anticipated if poison is found. Rarely have we obtained results which proved that the feed contained added poison. Accidental poisoning and poisoning resulting from carelessness in letting stock have access to poisonous materials about the premises, have occurred.

Such substances as yellow phosphorus, lead, arsenic, mercury and antimony have been reported as found in feeds. Arsenic to the amount of 75 parts per million has been found. Arsenic in any amount is dangerous and should not be present in feeds. Fluorine, a powerful poison, as high as 38 percent and in soluble form, has been reported. Some of these substances while not in sufficient amount to cause acute symptoms at a single feeding, are dangerous on account of their cumulative effect.

Experience indicates that most of the cases of suspected poisoning in which a sample of feed was submitted for analysis, were really cases of disease, and sending the sample only caused a waste of time and effort. Samples should not be sent until a competent veterinarian has investigated the case and decided that poison is indicated, possibly in the feed. The sample should be accompanied by a statement giving the conditions or symptoms of the case and the poison that is suspected. The statement should include also the name of the feed and the name and address of the manufacturer, to enable further investigation if the results of analysis should justify it.

MINERAL FEEDS

Mineral nutrients are necessary for the health and growth of both plants and animals. Plants get their mineral requirements from the soil. Animals, in turn, get their minerals from vegetable and animal food and sometimes mineral supplements such as salt and ground limestone. Most natural feeds contain the necessary minerals, especially the minor ones, but if the soil is deficient in minerals, vegetation grown on it, including food plants, may likewise be deficient. Such deficiencies can usually be supplied in mineral supplements.

Feed rations made of well-selected materials are shown by experimental evidence to contain sufficient minerals, except salt, to supply the needs of animals. Where there is need of additional mineral nutrients other than salt, such requirements are usually limited to calcium, phosphorus and iodine. This does not mean that other minerals are not essential also. Some of the minor minerals are necessary but as pointed out before, they are needed in very small amounts, and are usually supplied in sufficient amounts by normal feeds. If certain ones of these minerals are present in excessive amounts, such as iodine, fluorine and copper, they cause harmful effects and may even prove fatal. Some of the minerals found in the body may not be necessary for nutrition and are present only because they are contained in the feed. There appears to be an inter-relationship between certain minerals, the presence of one without the other may have no effect or may produce deleterious effects. Examples: Calcium and phosphorus; iron and copper; calcium and magnesium.

This Department is of the opinion that it is not good economy and not a good nutritional practice for feeders to use stock feeds and supplemental minerals which contain purgatives, worm remedies, poisons and tonics and are sold as "shot gun" remedies for ills of every nature, nutritional and otherwise. For example, a certain mineral mixture for hogs is declared by the manufacturer to be made of charcoal, sulfur, salt, potassium nitrate, ferrous sulfate, sodium bicarbonate, calcium carbonate, bone ash, potassium iodide, sodium sulfate, manganese carbonate, copper carbonate, cocoa meal, gentian, fenugreek, ginger, pennyroyal, linseed meal, mustard bran, nux vomica, strychnine, wormwood and poplar bark.

Granted that one or two ingredients of such a mixture are needed, the animal is forced to eat, along with them, a dozen others that are useless or even injurious. Under no circumstance does an animal need such a complex mixture. If the feed is nutritionally unbalanced, the deficient nutrients should be supplied in a few simple materials. If the animal is ill, the owner should consult a veterinarian. One can only conclude

that the purpose of these complex mixtures is to mystify the product in the mind of the purchaser. Some of the materials contained in them may furnish mineral elements that are needed, others may be medicinal in nature and even poisonous and should be administered only under the direction of a veterinarian, while others are simple nutrients.

The common names of materials generally used in mineral mixtures and some of the special-purpose stock feeds, their chemical or technical names, and their properties are given in the table which follows.

Table 1. Substances Used in Mineral Mixtures.

Common Name	Chemical Composition or Technical Name	Properties
Aniseed	Seed of the anise	Aromatic, carminative
Ashes; hardwood ashes	Same. Calcium carbonate and oxide, and potassium carbonate	Antacid, calcium nutrient
Bone ash	Same. Tricalcium phosphate	Calcium nutrient
Bone meal, steamed	Same. Tricalcium phosphate and nitrogenous organic matter	Calcium nutrient
Bone black; animal charcoal	Same. Tricalcium phosphate and carbon	Absorbent
Blood root	Sanguinaria	Irritating, emetic
Blue vitriol; bluestone	Copper sulfate	Irritant, emetic, poison
Calcite	Calcium carbonate	Antacid, calcium nutrient
Capsicum; red pepper	Dried fruit of capsicum	Aromatic, stomachic
Calcium carbonate	Same	Antacid, calcium nutrient
Cane molasses	Cane syrup	Sweetening agent, nutrient
Caraway seed	Same	Aromatic
Charcoal; wood or animal	Same	Absorbent
Chile saltpeter	Sodium nitrate	Diuretic, refrigerant, poison
Copperas; iron sulfate	Ferrous sulfate	Tonic, astringent
Copper sulfate	Cupric sulfate	Irritant, astringent, emetic, poison
Dextrose	Refined corn sugar	Sweetening agent, nutrient
Epsom salt	Magnesium sulfate (crystallized)	Cathartic, laxative
Fenugreek seed	Same	Aromatic
Gentian	Yellow gentian root	Bitter tonic
Ginger	Same	Stimulant, aromatic
Glauber's salt	Sodium sulfate (crystallized)	Cathartic, laxative
Glucose	Corn syrup	Sweetening agent, nutrient
Iron oxide	Ferric oxide	Weak tonic
Iodized salt	Salt and potassium iodide	Iodine, chlorine and sodium nutrients
Kelp	Seaweed	Contains iodine
Licorice	Licorice root	Adjuvant, corrective
Limestone	Calcium carbonate	Antacid, calcium nutrient
Linseed oil meal	Flaxseed meal	Nutrient, laxative

Table 1. Continued.

Common Name	Chemical Composition or Technical Name	Properties
Locust bean; St. John's bread	Carob bean	Nutrient
Manganese carbonate	Same	Manganese nutrient
Manganese sulfate	Same	Manganese nutrient
Magnesium oxide	Same	Antacid, laxative
Milk sugar	Lactose	Nutrient
Mustard bran	Same	Condiment, stimulant, emetic
Nux vomica	Same	Tonic, poison
Oyster shell	Same	Antacid, calcium nutrient
Paraffin wax	Same	Inert
Pennyroyal	Hedeoma pulegioides	Gentle aromatic
Petrolatum	Petroleum jelly	Emollient
Phosphatic limestone	Calcium carbonate, tricalcium phosphate and calcium fluoride	Antacid, calcium and phosphorus nutrients, poison
Poplar bark	Same	Tonic
Poke root	Phytolacca	Emetic, purgative, narcotic
Quassia	Quassia chips	Bitter tonic
Rock phosphate	Tricalcium phosphate, calcium carbonate and calcium fluoride	Calcium and phosphorus nutrients, poison
Salt	Sodium chloride	Sodium and chlorine nutrients, condiment, preservative
Sulfur	Same	Alterative, laxative
Sodium bicarbonate	Same	Antacid
Superphosphate	Same	Calcium and phosphorus nutrients
Salt peter	Potassium nitrate	Diuretic, diaphoretic, poison
Sodium thiosulfate	Same	Antipruritic
Tankage	Same	Nutrient
Tobacco	Same	Insecticide, sedative, anthelmintic, poison
Wormwood	Absinthium	Tonic, anthelmintic

Classification and Labeling. The rules for classifying and labeling mineral feeds approved by the Association of American Feed Control Officials are followed as closely as conditions permit, in the control and inspection of these products in Kentucky. These rules are:

“Mixed feeds containing both feed and more than 5 percent of mineral ingredients require, in addition to the usual declaration of the chemical feed analysis, a declaration of each ingredient contained therein and the minimum percentages of calcium (Ca), phosphorus (P), iodine (I), and the maximum percentage of salt (NaCl) if same be present. If minerals predominate in the mixture, the usual declaration of the chemical feed analysis, except protein, may be omitted.

In mineral feeds for which no nutritional properties other than those of the mineral matter are claimed, the usual chemical guarantees need not be declared. A declaration should be made of each ingredient contained therein and the minimum percentage of calcium (Ca), phosphorus (P), iodine (I), and the maximum percentage of salt (NaCl) if same be present. The mineral ingredients should be stated in the common English terms, if any such terms exist.

It being impossible to classify separately the drug ingredients and the mineral ingredients, be it resolved:

(a) That all mixtures containing mineral ingredients generally regarded as dietary factors essential for the normal nutrition of animals and which are sold or represented for the primary purpose of supplying these minerals as additions to rations in which these same mineral factors may be deficient, be classified as mineral feeds.

(b) That all other preparations which are sold or represented primarily for the cure, mitigation or prevention of disease be classified by this Association as drugs, medicines or specifics."

COMMON SALT

Because barium chloride, a poisonous substance, is often present in common salt, it was thought desirable to make an investigation of the salt sold on the Kentucky market, of a grade suitable for feeding to livestock. Nine samples of salt were obtained for analysis to determine the barium chloride content. The results, given below, show that two samples contained no barium chloride while seven contained only small amounts. All were within the tolerance of 0.05 percent allowed by the Bureau of Chemistry and Soils of the United States Department of Agriculture.

The Bureau reports as follows: "Investigation has shown that the highest grade of salt, designated as No. 1, or table and dairy grade, contains considerably less barium chloride than the tentative limit of five one-hundredths of one percent (0.05%) when ordinary care is exercised in the salt works to prevent an

undue concentration of the mother liquor in the grainers. Salt which contains more than this amount of barium chloride should be distinctly labeled 'Contains Barium Chloride. Not for Food Purposes.'**

Analyses of Common Salt

Brand	Manufacturer	Barium Chloride
Kanawha salt	J. Q. Dickinson & Co., Malden, W. Va.	0.022
Same	Same	0.023
Excelsior Ohio River salt	Excelsior Salt Works, Pomeroy, O.	0.030
Same	Same	0.025
Jefferson Island salt	Jefferson Island Salt Co., Louisville, Ky.	None
Ohio River salt	Pomeroy Salt Co., Pomeroy, O.	0.020
White Rock salt	Same	0.023
Ohio River salt (Kentucky Brand)	Salt Producers Sales Co., Pomeroy, O.	0.023
Eagle Evaporated salt	Union Salt Co., Cleveland, O.	None

SYSTEM OF TAGGING

The Kentucky system of labeling feeds has been in use since the enactment of the feed law and has proved its worth to feeders by the small percentage of yellow-tag feeds now consumed in Kentucky. The use of the yellow tag on filler feeds may not be entirely responsible for the reduction of sales of this class of feeds but it has played an important part in it.

A purchaser who buys feeds intelligently must read and be guided by the information given on the State tag. Too often the purchaser overlooks the statements on the tag and buys a low-priced feed, with the inevitable result that he gets a cheap, trashy feed of little feed value. Such practice is false economy. In reality, he pays more for the food or nutritional part than if he bought a good, clean feed at a higher price. The Department is trying to impress upon feeders the importance of reading and studying the information given on the official tag when selecting feeds. This cannot be overemphasized.

Of course it is the feeder's privilege to buy cheap, trashy feeds; such materials may be worth something as roughage, but

* Service and Regulatory Announcement No. 13. U. S. Food and Drug Administration, Washington, D. C.

usually he has materials just as good going to waste on his farm.

To mark more conspicuously certain important differences in the character of feeds, thereby making easier the understanding and the selection by the purchaser, the Department issues tags according to a three-color scheme as follows:

A manila tag printed in black ink designates a feed made from one grain or plant; that is, a "straight" feed. Examples: wheat bran; wheat mixed feed; hominy feed; cottonseed meal.

A manila tag printed in red ink designates a feed made from the products or by-products of two or more grains or plants or animal by-products; that is, a "straight" mixed feed. Examples: wheat bran and corn bran; hominy feed, wheat bran and cottonseed meal; corn, oats and alfalfa meal. The tag plainly tells what the materials are.

A yellow tag printed in black ink designates a feed containing more than 3 percent of a material of little or no nutritive value. Such are usually known as "yellow tag" or "adulterated" feeds. Examples: oat hulls; cottonseed hulls; screenings and screenings refuse or waste; or other similar materials containing an excessive percentage of fiber.

Table 2. Miscellaneous Analyses
 (This table contains analyses of miscellaneous feeds and feed materials, made since those reported in Bulletin No. 340 and Bulletin No. 7, Regulatory Series.)

Material	Protein Percent	Fat Percent	Carbohydrates		Water Percent	Ash Percent
			Fiber Percent	N. F. Ext. Percent		
Alaska peas	20.9	1.4	5.4	.....	.....	.....
Ashes, hickory*	8.5	2.0	23.1	64.2	11.1	2.9
Barley malt chaff	12.0	2.3	7.5	.....	.....	.....
Barley screenings	9.4	1.9	17.3	68.3	10.5	3.6
Broom corn	13.6	3.5	5.5	52.7	7.3	5.5
Buckwheat screenings (Canadian)	9.0	9.7	15.8	33.8	6.7	7.2
Citrus meal	17.6	2.7	32.0	41.9	7.9	4.8
Clover hay (heated-color black)	21.9	6.7	16.8	40.1	7.8	4.8
Dodder seed	13.8	7.1	26.4	11.6	5.0	3.1
Dodder seed, unhulled	27.4	32.9	17.9	55.9	11.0	4.3
Hemp seed	17.0	2.2	10.8	59.5	9.7	.....
Honey locust beans (Gleditschia triacanthos)	10.6	2.9	13.0	.....	.....	.....
Honey locust beans, with pods	66.7	21.5	23.7	27.9	7.0	4.7
Liver meal (Argentine)	18.2	18.5	37.8	37.8	10.0	9.9
Okra seed	13.8	6.1	22.4	.....	.....	.....
Ragweed hay	30.8	6.3	16.6	.....	.....	.....
Soybean screenings	27.5	1.1	6.1	52.7	9.8	2.8
Vetch (hairy) seed	.....	.....	.....	.....	.....	.....

* Ca-38.87, P-0.50, K-2.04, H₂O-0.39.

Table 3. Average Composition of Feedstuffs

(This table contains the average analyses of feed materials usually found in commercial feeds in Kentucky. Analyses of many other materials have been made, but it is not thought of sufficient importance to publish them here. The data are derived from analyses made by this Department, supplemented by other published results when found desirable.)

Feedstuff	Protein Percent	Fat Percent	Carbohydrates		Water Percent	Ash Percent
			Fiber Percent	N. F. Ext. Percent		
Concentrates						
Alfalfa leaf meal	20.0	3.0	16.0	42.5	6.5	12.0
Alfalfa meal	14.0	2.0	30.0	46.0	9.0	9.0
Barley	11.5	2.0	5.0	69.8	9.0	2.7
Beet pulp, dried	8.0	0.5	20.0	60.0	8.0	3.5
Blood, dried	82.0	0.9	---	4.1	9.7	3.3
Bone meal, raw	24.0	3.0	---	4.0	7.3	61.7
Bone meal, steamed	7.1	3.3	0.8	3.9	3.6	81.3
Brewers' dried grains	24.0	6.5	15.0	42.5	8.2	3.8
Buckwheat	10.5	2.5	10.5	62.5	12.0	2.0
Buttermilk, dried	32.5	5.5	---	43.5	4.5	2.0
Buttermilk, semi-solid	13.5	3.0	10.5	16.0	65.0	2.5
Coconut oil meal (old process)	20.5	8.0	2.0	45.0	9.5	6.5
Corn	9.5	4.0	8.0	72.0	11.0	1.5
Corn-and-cob meal	8.0	3.5	7.8	68.5	10.5	1.5
Crushed ear corn with husks	7.5	3.0	10.0	61.7	11.0	1.8
Corn bran	10.0	6.0	10.0	72.0	10.0	2.3
Corn chop	9.5	4.0	2.0	72.0	11.0	1.5
Corn chop (screened)	8.5	3.7	2.5	72.8	11.0	1.5
Corn feed meal	8.5	4.0	4.5	70.5	11.0	1.5
Corn germ meal	21.0	9.0	9.0	50.7	7.0	3.3
Corn gluten feed	25.0	2.7	7.0	49.8	9.5	6.0
Corn gluten meal	42.0	2.3	2.5	42.9	8.5	1.8
Cottonseed meal, 48% protein	43.0	6.0	10.0	29.0	6.5	5.5
Cottonseed meal, 41% protein	41.0	5.5	11.0	30.0	7.0	5.5
Distillers' corn dried grains	30.0	10.0	11.5	37.4	8.5	2.6
Distillers' rye dried grains	18.0	16.5	16.0	47.8	8.5	3.2
Fish meal	55.0	8.0	0.9	7.7	7.7	20.7
Hominy meal	11.0	8.0	5.5	62.9	10.0	2.6
Kafir corn	11.0	3.0	2.5	70.0	11.8	1.7
Lespedeza seed	39.0	7.5	9.0	31.5	8.5	4.5
Linseed oil meal (new process)	37.0	3.0	8.5	36.4	9.5	5.6

Feedstuff	Protein Percent	Fat Percent	Carbohydrates		Water Percent	Ash Percent
			Fiber Percent	N. F. Ext. Percent		
Linseed oil meal (old process)	34.0	6.5	8.5	36.5	9.0	5.5
Malt sprouts	31.0	2.0	12.0	41.0	8.5	5.5
Meat scraps, 50% protein	50.0	7.5	2.3	6.7	7.5	26.0
Millet seed	11.5	3.0	7.8	65.4	9.0	8.3
Molasses, cane	3.2			62.4	25.9	8.5
Oats	11.5	4.6	11.0	59.9	9.5	3.0
Oat kernels	16.0	6.4	1.6	66.0	8.0	6.3
Peanut oil meal (old process)	42.5	7.5	9.0	28.1	6.6	9.5
Rice bran	12.5	12.5	12.5	44.0	9.4	2.0
Rye middlings	11.8	1.8	1.8	73.2	9.8	3.8
Rye milk, dried	15.5	3.7	5.5	61.7	6.0	8.0
Sorghum grains	34.0	1.0	2.0	71.2	12.0	1.9
Soybean oil meal (new process)	9.5	3.4	4.3	36.5	9.9	5.3
Soybean oil meal (old process)	44.0	17.5	7.0	32.7	8.4	6.4
Tankage, 60% protein	41.0	5.0	6.5	31.8	9.5	6.2
Tankage, 50% protein	60.0	7.0	2.0	4.5	8.0	18.5
Wheat	50.0	10.5	2.5	6.5	8.0	22.5
Wheat bran	75.0	11.0	2.0	1.2	8.0	2.8
Wheat brown middlings or shorts	12.4	2.1	2.2	71.2	10.2	1.9
Wheat germ meal	15.4	4.0	2.2	9.5	10.1	6.0
Wheat gray middlings or shorts	16.5	4.5	7.3	55.3	10.3	5.4
Wheat mixed feed	28.5	10.7	2.5	56.0	8.9	4.5
Wheat red dog flour	16.7	4.6	5.5	44.9	10.5	4.4
Wheat white middlings or shorts	16.0	4.4	8.3	56.0	10.1	5.2
Whey (American cheese)	16.2	4.0	2.4	64.4	8.5	2.6
Yeast, dried	45.0	3.3	2.9	4.7	10.3	0.7
Yeast, grains	20.8	3.0	1.0	36.0	33.4	7.0
		6.3	16.1	47.7	6.3	2.8
Roughages						
Alfalfa hay	14.5	2.3	29.7	36.3	8.6	8.6
Bluegrass hay	8.2	2.5	58.8	42.5	10.5	6.5
Clover hay, alsike	12.0	2.2	27.1	39.8	11.0	7.9
Clover hay, red	11.8	2.6	27.3	40.1	11.8	6.4
Corn stover (ears removed)	5.9	1.6	30.8	46.5	9.4	5.8

Alfalfa hay	8.2	2.3	27.1	47.6	8.9	6.4
Bluegrass hay	12.0	2.2	22.5	35.1	9.9	11.3
Clover hay, alsike	11.8	2.5	28.0	40.1	10.5	5.4
Clover hay, red	5.9	2.8	26.3	38.7	9.2	7.3
Corn stover (ears removed)		2.5	23.8	45.0	11.6	4.9
Fillers						
Corn stover (with ears)	7.8	2	27.1	47.6	8.9	6.4
Cowpea hay	18.6	2.6	22.5	35.1	9.9	11.3
Lespedeza hay	15.5	2.5	28.0	40.1	10.5	5.4
Soybean hay	15.5	2.8	26.3	38.7	9.2	7.3
Timothy hay	6.2	2.5	23.8	45.0	11.6	4.9
Fillers						
Alfalfa stem meal	6.3	0.9	57.4	24.9	5.6	4.9
Buckwheat hulls	4.4	1.0	48.7	38.5	10.3	2.1
Corn cob	2.0	0.4	31.8	54.3	10.0	1.5
Cottonseed hulls	3.9	1.0	45.9	37.2	9.7	2.7
Oat hull feed	5.5	2.1	26.5	52.9	7.5	5.5
Oat hulls	3.8	1.2	30.0	51.7	6.8	6.5
Screenings*						
Screenings refuse**						

* Varies in quality from fair to poor.

** Varies in quality from poor to worthless and even dangerous.

Table 4. Average Digestibility of the Nutrients in Feedstuffs.

(This table gives the average digestibility of the nutrients in feedstuffs taken from "Feeds and Feeding" by Morrison. The table is copyrighted and is quoted by permission of the author.)

Feedstuff	Protein Percent	Fat Percent	Carbohydrates	
			Fiber Percent	N. F. Ext. Percent
Concentrates				
Alfalfa leaf meal	77	30	56	76
Alfalfa meal	71	30	50	73
Barley	79	80	56	92
Beet pulp, dried	53	100	81	85
Blood, dried	86	89	49	57
Brewers' dried grains	81	73	24	77
Buckwheat	75	49	43	81
Buttermilk, dried	85	100	43	87
Coconut oil meal (old process)	90	91	57	94
Corn	76	84	45	88
Corn-and-cob meal	52	76	72	82
Corn bran	58	74	92	91
Corn gluten feed	86	93	58	93
Corn gluten meal	85	97	45	74
Cottonseed meal, 43% protein	81	97	83	79
Distillers' corn dried grains	73	80	45	67
Distillers' rye dried grains	56	99	86	90
Fish meal	81	92	55	92
Hominy meal	71	76	74	80
Kafir corn	84	89	59	82
Linseed oil meal (new process)	87	92	87	80
Linseed oil meal (old process)	77	85	87	80
Malt sprouts	93	98	53	92
Meat scraps, 50% protein	71	73	53	90
Millet seed	32	88	38	81
Molasses, cane	78	95	37	84
Oats	89	83	26	74
Peanut oil meal (old process)	69	64	98	92
Rice bran	84	96	100	98
Rye	94	56	37	87
Skim milk, dried	57	88	37	67
Sorghum grains	89	68	99	100
Soybeans (seed)	92	100	90	100
Soybean oil meal (old process)	86	83	53	95
Tankage, 60% protein (with swine)	83	81	60	79
Wheat	85	85	60	85
Wheat bran	84	93	54	89
Wheat brown middlings or shorts	84	87	36	76
Wheat gray middlings or shorts	77	70	60	83
Wheat mixed feed	80	89	42	99
Wheat red dog flour	80	89	42	99
Wheat white middlings or shorts	90	89	42	99
Roughages				
Alfalfa hay	72	32	43	71
Bluegrass hay	57	52	66	61
Clover hay, alsike	64	43	49	65
Clover hay, red	59	58	51	69
Corn stover (ears removed)	37	62	66	59
Corn stover (with ears)	52	73	66	71
Cowpea hay	68	39	47	68
Lespedeza hay	63	55	44	61
Soybean hay	75	60	51	58
Timothy hay	46	48	51	58

Table 4. Continued.

Feedstuff	Protein Percent	Fat Percent	Carbohydrates	
			Fiber Percent	N. F. Ext. Percent
Fillers				
Alfalfa stem meal	51	48	39	59
Buckwheat hulls	9	10	---	62
Corn cob	19	25	56	51
Cottonseed hulls	2	76	51	50
Oat hull feed	75	78	42	46
Oat hulls	21	30	53	40

CORN

Requests were frequent for information on the composition of corn grown in different parts of the State, and on the mineral content in addition to the regular feed analysis. Table 5 contains analyses of samples in two groups: first, those taken on the market in different parts of the State; second, corn grown in certain counties in the State under known conditions, described in the notes following this table. Space does not permit a discussion of the results. However, the differences in protein, the proportion of phosphorus in the ash and the low calcium content should be noted.

Notes on the Corn Samples in Group 2. Lab. No. 1416. White corn grown about 2 miles south of Elkton on land that produces 40 bushels of corn to the acre. Only soil treatment was the application of about 125 pounds per acre of 20 percent superphosphate before planting.

Lab. No. 1417. White corn grown about 4 miles southeast of Bowling Green on land that produces 30 bushels of corn to the acre. The soil was not treated with limestone or fertilized.

Lab. No. 1418. White corn grown near Lewisport on bottom (overflow) land that produces 60 bushels of corn to the acre. The soil was not treated with limestone or fertilized.

Lab. No. 1419. White corn grown near Cloverport on land that produces 40 to 60 bushels of corn to the acre. The soil was not treated with limestone or fertilized.

Lab. No. 1420. White corn grown about 6 miles west of Elkton on land that produces 40 bushels of corn to the acre. No limestone or fertilizer was applied to the soil but a small amount of barnyard manure was scattered in places.

Lab. No. 1421. White corn grown about 2 miles west of Marion. No limestone was applied to the soil but 400 pounds 20 percent superphosphate has been used in the last 4 years. Barnyard manure was scattered liberally.

Lab. No. 1422. White corn grown near Finchville on bottom land that had not been broken for forty years and that produces 70 bushels of corn to the acre. No limestone or fertilizer was applied to the soil.

Lab. No. 1423. Yellow corn grown about 3 miles south of Owensboro on land that produces 50 bushels of corn to the acre. No limestone or fertilizer was applied to the soil.

Lab. No. 1424. Yellow corn grown about 6 miles southwest of Elkton on land that produces 40 bushels of corn to the acre. The soil was not treated with limestone or fertilized.

Lab. No. 1425. White corn grown about 2 miles east of Horse Cave on land that produces 50 bushels of corn to the acre. The soil was treated with limestone and 100 pounds of complete fertilizer per acre was applied.

Lab. No. 1426. White corn grown about $1\frac{1}{4}$ miles north of Uno on land that produces 50 bushels of corn to the acre. Only soil treatment was the application of 3 tons of limestone, and barnyard manure before planting.

Lab. No. 1427. Mixed white, yellow and red corn grown about 1 mile southwest of Lebanon. No limestone or fertilizer has ever been applied to the soil.

Lab. No. 1428. Yellow corn grown near Lewisport on bottom (overflow) land that produces 60 bushels of corn to the acre. The soil was not treated with limestone or fertilized.

Lab. No. 1430. White corn grown about 4 miles southwest of Princeton on land that produces 50 bushels of corn to the acre. Only soil treatment consisted of the heavy application of manure.

Table 5. Analyses of Corn. Percent of the Air-Dry Sample.

Lab. No.	County	Color	Protein	Fat	Carbohydrates		Water	Ash	Silicon	Calcium	Phosphorus	Potassium
					Fiber	N. F. Ext.						
Group 1. On the market. Where grown not ascertained.												
1202	Pulaski	White	8.5	4.2	1.8	71.8	12.6	1.1				
1203	Boyle	White	9.4	4.4	1.9	71.5	11.8	1.0				
1204	Spencer	White	9.1	4.2	2.0	72.1	11.4	1.2			0.23	0.32
1205	Adair	White	8.0	4.5	2.0	71.2	13.2	1.1	0.02	0.07		
1206	Nelson	White	9.4	4.1	2.1	69.5	13.8	1.1				
1207	Washington	Yellow	8.7	4.1	2.4	69.4	14.1	1.3				
1208	Taylor	White	8.3	4.1	2.0	71.7	12.7	1.2				
1209	Pulaski	White	8.7	4.8	2.1	70.8	12.4	1.2	0.02	0.05	0.23	0.32
1210	Green	White	7.3	4.4	1.9	73.2	12.1	1.1				
1211	Anderson	Mixed	8.6	4.3	2.1	68.5	15.1	1.4				
1212	Shelby	Yellow	8.7	4.1	2.0	70.7	13.4	1.1	0.01	0.05	0.30	0.38
1213	Woodford	White	8.8	4.2	2.2	70.3	13.1	1.4				
1215	Clark	Yellow	7.4	3.9	2.0	69.3	16.2	1.2				
1216	Montgomery	White	8.3	4.0	2.0	70.5	14.1	1.1				
1219	Fleming	Mixed	9.1	3.9	2.0	73.1	10.6	1.3				
1220	Boyd	Yellow	9.1	4.2	1.8	73.2	10.4	1.3				
1221	Lewis	Red	8.5	4.1	2.0	74.1	10.3	1.0	0.06	0.11	0.21	0.26
Group 2. Grown in the counties named.												
1416	Todd	White	10.2	4.7	1.8	71.7	10.5	1.1	0.02	0.05	0.25	0.31
1417	Warren	White	9.7	5.1	1.9	71.5	10.6	1.2	0.01	0.04	0.25	0.33
1418	Hancock	White	9.5	4.7	1.9	72.1	10.5	1.3	0.01	0.03	0.31	0.32
1419	Breckinridge	White	9.7	4.3	1.8	72.5	10.3	1.4	0.02	0.03	0.31	0.35
1420	Todd	White	9.0	4.5	2.0	73.9	9.4	1.2	0.04	0.03	0.25	0.32
1421	Crittenden	White	9.0	4.4	1.9	73.9	9.6	1.2	0.01	0.02	0.26	0.32
1422	Shelby	White	10.3	4.2	2.1	71.4	9.6	1.4	0.01	0.04	0.31	0.39
1423	Daviess	Yellow	9.0	4.5	1.9	73.1	10.3	1.2	0.01	0.04	0.27	0.33
1424	Todd	Yellow	10.6	4.5	2.0	70.8	11.0	1.1	0.01	0.04	0.25	0.33
1425	Hart	White	10.6	4.4	2.0	71.7	10.1	1.2	0.00	0.03	0.26	0.35
1426	Hart	White	10.0	4.8	1.9	72.6	9.5	1.2	0.00	0.03	0.26	0.35
1427	Marion	Mixed	7.8	4.6	1.9	75.2	9.3	1.2	0.00	0.04	0.25	0.34
1428	Hancock	Yellow	8.9	4.3	1.9	73.5	10.1	1.3	0.00	0.03	0.29	0.34
1430	Caldwell	White	10.0	4.7	1.6	72.1	10.4	1.2	0.01	0.03	0.27	0.32

BARLEY MALT SPROUTS AND BY-PRODUCTS

Following the repeal of the prohibition law, malt sprouts came into more prominence as a by-product feed. Because of the nature of this by-product, barley malt hulls find their way into the sprouts during separation of the sprouts from the malt; the necessity of chemical and microscopical control therefore is emphasized. The nutritive value of barley malt sprouts is dependent upon the proportion of hulls present, and this varies greatly, as shown from the data in Table 6. Analyses of samples preliminary to those in the table indicated no uniformity in the

Table 6. Analyses of Barley Malt Sprouts and By-Products. Percent of the Air-Dry Material.

Lab. No.	Protein	Fat	Carbohydrates		Water	Ash
			Fiber	N. F. Ext.		
Barley Malt Sprouts						
1850	34.2	0.8	12.8	40.6	4.9	6.7
1902	33.3	1.5	12.6	37.0	9.2	6.4
1918	32.5	1.9	13.4	37.3	8.2	6.7
1922	30.1	2.5	13.8	37.6	9.9	6.1
1932	32.8	2.2	12.9	36.5	8.7	6.9
1933	32.0	2.3	14.1	37.7	8.5	5.4
1938	32.6	1.8	13.4	35.2	10.2	6.8
Barley Malt Sprouts and Barley Malt Hulls						
1852	22.5	1.6	14.4	48.9	6.7	5.9
1856	20.0	1.5	17.4	48.3	6.8	6.0
1903	19.1	1.7	15.4	49.2	9.3	5.3
1921	18.3	2.3	13.9	53.4	5.9	6.2
1934	20.2	2.2	15.9	47.8	8.1	5.8
1936	21.5	2.0	16.9	47.3	6.7	5.6
1952	21.8	1.6	17.3	45.7	7.8	5.8
1963	22.4	1.6	17.0	46.6	6.1	6.3
1857*	27.7	1.3	17.4	42.1	5.1	6.4
1920*	29.6	2.1	14.2	40.9	6.9	6.3
1931*	28.3	2.4	13.5	37.6	12.2	6.0
1937*	29.8	1.6	14.6	41.4	6.5	6.1
1953*	30.0	1.6	15.4	39.3	7.8	5.9
1962*	30.4	1.4	15.2	40.1	6.5	6.4
1964*	27.9	1.7	15.7	39.7	8.4	6.6
Barley Malt Hulls						
1851	10.1	1.4	22.3	54.3	6.5	5.4
1917	9.0	1.6	21.3	53.9	8.9	5.3
1924	9.2	1.6	22.0	53.7	8.7	4.8
1932	6.8	1.3	25.7	50.3	10.2	5.7
1939	9.2	1.5	21.5	54.2	8.6	5.0
1965	8.9	1.5	25.0	51.6	7.8	5.2
Barley Malt						
1849	12.8	2.0	6.7	69.9	6.1	2.5
1855	12.6	2.3	5.9	71.5	5.4	2.3

* These samples were represented as barley malt sprouts but contained excess hulls.

products found on the market and that, for this reason, the products, in many cases, were not properly named. Added barley hulls or barley screenings were being used with malt sprouts and sold under the name malt sprouts. The analyses reported in the table were made in order to obtain data from which to make standards of quality for the different grades and prevent the use of excess barley hulls.

It will be noted from Table 6 that malt sprouts relatively free of malt hulls contain 30 percent protein, or more. Those containing hulls often run this high but they usually are below this figure, in proportion to the amount of hulls. The percentage of fiber is another index of excessive hulls. A maximum of 14 percent fiber in malt sprouts permits the amount of hulls necessary in good malting practices.

DOG FEEDS

In the early part of the year, 63 samples of canned dog feeds were collected for examination, most of which showed marked improvement over previous years. Only in a few instances did these feeds show even minor deficiencies in meeting the standards set by the Department and the guaranties made by the manufacturers.

In midyear, a certain group of manufacturers of canned dog feeds filed a suit against the Director of the Experiment Station and the Head of the Department of Feed Control, with a restraining order attached, asking that the Director be refused the power to require the percentage of water to be stated on the label. This restraining order reduced the effectiveness of the law so much that very little inspection work has been done on canned dog feeds since July of this year. Considerable work and time were necessary in defending the case. However, since the close of the year, a decision by the Franklin Circuit Court Judge, William B. Ardery, upholding the regulations of the Director and the Head of the Department has been handed down. An appeal by the plaintiff to the Kentucky Court of Appeals is pending.

The results of analyses of dog feeds are found in Table No. 7.

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Table 7. Analyses of Dog Feeds*

Manufacturer and Brand Name	Sample taken from:	Protein	Fat	Carbohy- drates		Water	Ash	Remarks
				Fiber	N. Ext.			
Altsheler & Co., Louisville, Ky. Cherokee Dog Feed	Manufacturer's Warehouse	10.2 10.0	2.3 2.0	1.1 1.5	12.7 70.0	68.7 70.0	5.0	As guaranteed.
Armour & Co., Chicago, Ill. Armour's Dog Feed	Armour & Co., Louisville	12.2 12.0	3.9 2.5	0.6 1.2	10.1 74.0	72.0 74.0	1.2	As guaranteed.
Austin Dog Food Co., Austin, Ind. "Tru-Blu" Dog Feed	H. Runyan & Son, Louisville	10.3 10.0	2.1 2.0	1.2 1.5	13.5 70.0	67.7 70.0	5.2	As guaranteed.
Ballard & Ballard Co., Louisville, Ky. Insurance Dog Feed	Louisville Hay, Grain & Coal Co., Louisville	26.1	3.8	7.3	.....	.....	.....	Excess fiber.
Same	Fraize Bros., Cloverport	25.0 20.0	4.3 2.0	4.9 5.0	.....	.....	.....	As guaranteed.
Chappel Bros., Rockford, Ill. Ken-L-Ration	A. Wahking & Sons, Louisville	8.3	3.7	0.6	11.5	70.5	5.4	Deficient in protein.
Same	Piggly-Wiggly Co., Lexington	11.4 10.2	4.1 2.0	1.2 1.5	11.4 70.0	65.2 70.0	6.7	As guaranteed.
Coast Fishing Co., Wilmington, Cal. Balto Dog and Cat Feed	Buschmeyer & Ogden, St. Matthews	15.2 12.5	11.3 6.0	1.3 1.0	6.0 70.0	62.9 70.0	3.3	As guaranteed.
W. D. Creasey Sons, Cincinnati, O. Little Sport Dog Feed	Tony Bezold, Newport	9.6 10.0	1.9 2.0	0.8 1.5	11.6 70.0	73.0 70.0	3.1	Excess water.
Daily Packing Co., Chicago, Ill. Daily Dog Feed	A. & P. Tea Co., Winchester	12.0 12.5	2.6 3.5	1.4 1.2	7.9 70.0	72.6 70.0	3.5	No charcoal found. De- ficient in fat. Excess weight. Deficient in net water. Misbranded. Tankage present the not guaranteed.
Doggie Dinner, Inc., Terre Haute, Ind. Doggie Dinner	Otter & Co., Louisville	11.7 10.0	3.2 2.7	1.4 1.0	12.1 70.0	66.6 70.0	5.0	No meat found.
Doyle Packing Co., Mokenca, Ill. Square Deal Dog and Cat Feed	Albers Grocery, Newport	10.9 10.0	1.7 2.0	1.1 1.5	10.7 74.0	71.7 74.0	3.9	No meat found.

Strongheart Rations Dog and Cat Feed	A. & P. Tea Co., Lexington	10.5	3.9	1.2	11.7	68.6	4.1	Same.
Roxey Rations Dog and Cat Feed	Remkes Market, Ft. Mitchell	10.0	2.0	1.5	74.0	74.0	3.7	As guaranteed.
Gaines Food Co., Sherburne, N. Y. Gaines Granular Dog Feed	Haller's Pet Shop, Louisville	26.4	4.3	2.9	.....	.....	.....	As guaranteed.
Kasco Mills, Toledo, O. Kasco Complete Dog Ration	Whitesburg Wholesale Co., Whitesburg	25.0	4.5	3.5	.....	.....	.....	Fish meal present tho not guaranteed.
King Karlo Dog Food Co., Austin, Ind. King Karlo Dog Feed	Carl Yaeger, Jeffersontown	10.6	2.5	1.3	13.3	67.0	5.2	As guaranteed.
Same	Dames Foods, Newport	10.6	1.7	1.1	13.8	70.0	2.8	Same.
Kroger Grocery & Baking Co., Cincinnati, Ohio. Kroger Dog Feed	Kroger Gro. & Bak. Co., Alexandria	10.0	2.0	1.5	.....	70.0	.....	Deficient in fat.
The Larrowe Milling Co., Detroit, Mich. Larro Dog Feed	Sanitary Grocery, Williamsburg	28.6	5.5	4.0	.....	.....	.....	As guaranteed.
Lexington Roller Mills Co., Lexington, Ky. Thoroughbred Dog Ration	Manufacturer's Warehouse	24.5	4.5	4.5	.....	.....	.....	As guaranteed.
The Midland Grocery Co., Portsmouth, O. Red Bird Dog Feed	The New Market, Catlettsburg	22.1	3.6	3.3	.....	.....	.....	As guaranteed.
S. E. Mighton Co., Cleveland, O. Spot Dog and Cat Feed	Piggly-Wiggly Co., Lexington	10.8	2.8	1.3	11.2	68.8	5.1	As guaranteed.
John Morrell & Co., Ottumwa, Ia. Red Heart Dog Feed—Diet A	Roby & Clemens, St. Matthews	10.0	3.0	1.2	70.0	70.0	.....	As guaranteed.
Morrow Canning Corp., Morrow, O. Brownie's Dog Feed	Highland Supermarket, Ft. Thomas	11.1	2.9	1.0	12.2	70.1	2.7	As guaranteed.
Same	Sandy Valley Gro. Co., Ashland	10.5	5.5	0.9	9.8	70.5	2.8	As guaranteed.
		10.5	2.5	1.0	74.0	74.0	.....	As guaranteed.
		10.3	3.0	1.0	11.0	70.5	4.2	As guaranteed.
		11.5	3.1	1.3	11.5	67.4	5.2	Same.
		10.0	3.0	1.2	70.0	70.0	.....	.....

* Manufacturer's guaranty is printed in boldface type.

Table 7. Analyses of Dog Feeds*

Manufacturer and Brand Name	Sample taken from:	Protein		Fat	Carbohy- drates		Water	Ash	Remarks
		10.6	2.8		Fiber	N. F.			
Fido Dog Feed	Same	10.0	3.0	1.0	11.7	68.9	5.0	Same.	
National Biscuit Co., New York, N. Y. "Milk-Bone Brand" Junior Dog Biscuit	Kroger Gro. & Bak. Co., Cynthiana	22.8	2.4	1.9	.....	.....	.....	As guaranteed.	
Perfection Foods Co., Battle Creek, Mich. Perfection Brand Dog Feed	Aubrey & Co., Louisville	16.6	3.3	2.9	.....	.....	.....	As guaranteed.	
Ralston Purina Co., St. Louis, Mo. Purina Dog Chow	J. A. Bennett, Taylorsville	14.0	1.0	5.0	.....	.....	.....	As guaranteed.	
Rival Packing Co., Chicago, Ill. Rival Dog Feed	Miller's Cash Store Taylorsville	24.3	7.1	4.2	.....	.....	.....	As guaranteed.	
Same	Bauer Bros., St. Matthews	20.0	3.0	6.0	.....	.....	.....	As guaranteed.	
G. P. Rose & Co., Nashville, Tenn. Triumph Dog Feed	Blue Grass Produce, Carlisle	10.9	2.9	0.6	11.9	72.8	0.9	Same.	
Spratts Patent (America) Ltd., Newark, N. J. Spratts Ovals No. 1	Haller's Pet Shop, Louisville	11.0	3.8	0.9	10.2	73.3	0.8	As guaranteed.	
Variety Foods, Inc., Indianapolis, Ind. Vigor Dog Feed	Albers Grocery, Newport	10.0	2.5	1.0	.....	74.0	.....	As guaranteed.	
		24.6	7.6	4.2	.....	.....	.....	As guaranteed.	
		22.0	8.0	5.0	.....	.....	.....	As guaranteed.	
		21.4	2.1	1.1	.....	.....	.....	As guaranteed.	
		20.0	2.0	1.5	.....	.....	.....	As guaranteed.	
		8.3	2.0	1.2	8.5	77.0	3.0	No carrots found. Defi- cient in protein. Ex- cess water. Mis- branded.	
		10.0	2.0	1.5	.....	74.0	.....	

* Manufacturer's guaranty is printed in boldface type.

SUMMARY OF RESULTS OF INSPECTION AND ANALYSIS, 1938

Because of the cost of printing and for the further reason that the analyses in detail have been reported to persons interested, only a summary of the results of inspection and analyses is published in this bulletin.

Acme-Evans Co., Indianapolis, Ind. Inspection samples analyzed, 11.

Acme Feed, 1; equaled guaranty.

Acme Red Dog, 1; equaled guaranty.

Acme Wheat Brown Middlings and Screenings, 2; equaled guaranty.

Acme Corn Feed Meal, 1; equaled guaranty.

Acme Hominy Feed, 1; equaled guaranty.

Acme 18% Protein Egg Mash, 2; equaled guaranty.

Producer Horse Feed, 1; equaled guaranty.

Acme 16% Protein Dairy Feed, 1; equaled guaranty.

Acme 20% Protein Pailfill Dairy Feed, 1; no oat hull feed found; excess screenings refuse present.

The Acme Mills, Hopkinsville, Ky. Inspection samples analyzed, 2.

Wheat Brown Shorts, 1; equaled guaranty.

"Supreme Brand" 16% Protein Dairy Feed, 1; lespedeza screenings present tho not guaranteed; misbranded.

Alfocorn Milling Co., E. St. Louis, Ill. Inspection samples analyzed, 5.

"Full Pail" 16% Protein Dairy Feed, 3; 1 deficient in protein; 1 no salt found; 1 corn product present tho not guaranteed.

Alfocorn 16% Protein Milk Maker, 1; only trace linseed oil meal present.

Alfocorn 24% Protein Milk Maker, 1; no linseed oil meal found.

E. T. Allen Co., Atlanta, Ga. Inspection samples of Empire 41% Protein Cottonseed Meal analyzed, 7; 1 deficient in protein.

Allied Mills Inc., Chicago, Ill. Inspection samples analyzed, 18.

Empire Growing Mash, 1; no dried milk products found.

Empire Egg Mash, 1; equaled guaranty.

Wayne Egg and Breeder Mash, 1; deficient in protein.

Wayne 26% Protein Mash Supplement (With Sardine Oil), 1; equaled guaranty.

Wayne Pigeon Feed, 1; equaled guaranty.

Wayne Horse Feed, 1; equaled guaranty.

Sucrene Horse and Mule Feed, 1; equaled guaranty.

Wayne Hog Supplement, 3; 1 deficient in protein.

Topper 16% Protein Dairy Feed, 3; 1 deficient in fat, no corn gluten feed or oat hull feed found; 1 no calcium carbonate found.

Sucrene 16½% Protein Dairy Ration, 1; equaled guaranty.

Wayne 24% Protein Dairy Feed, 4; equaled guaranty.

- Always-A-Head Mills, Inc., E. St. Louis, Ill. Inspection sample of "Always-A-Head" 18% Protein Laying Mash analyzed, 1; ground oat product present tho not guaranteed.
- Anderson & Spilman, Danville, Ky. Inspection sample of "Snowflake" Feed analyzed, 1; deficient in protein; no ground barley found.
- Arcady Farms Milling Co., Chicago, Ill. Inspection samples analyzed, 19.
- Arcady Developing Grains, 1; deficient in protein; no oat groats found.
- Sunkist Starting Mash, 1; excess fiber.
- Arcady Wonder Starting Mash, 1; excess fiber.
- Arcady Wonder Complete All-Mash Chick Starter, 2; 1 deficient in protein and fat, wheat bran present tho not guaranteed.
- Sunkist Starter and Grower All-Mash, 1; excess fiber; no dried buttermilk found.
- Wonderfat Station Feed, 1; equaled guaranty.
- Sunkist Egg Mash, 2; 1 no linseed oil meal found.
- Arcady Wonder Laying Mash, 1; equaled guaranty.
- Wonder Turkey Starting Mash, 1; corn gluten meal present tho not guaranteed; "special mixture" not found.
- Arcady Wonderlas (Supplement), 2; excess fiber.
- "Arcady Complete Brand" Rabbit Feed, 1; equaled guaranty.
- Arcady Sweet 16% Protein Dairy Feed, 2; 1 cottonseed meal and distillers dried grains present though not guaranteed.
- Besbet 16% Protein Dairy Feed, 2; screenings refuse substituted for cottonseed hulls.
- Arco 24% Protein Dairy Ration, 1; equaled guaranty.
- Armour & Co., Chicago, Ill. Inspection samples of Armour's 60% Protein Meat Meal Digester Tankage analyzed, 2; equaled guaranty.
- Ashcraft-Wilkinson Co., Atlanta, Ga. Inspection samples of "Helmet Brand" 41% Protein Cottonseed Meal analyzed, 7; 1 deficient in fat; 6 excess fiber.
- The Great Atlantic & Pacific Tea Co., New York, N. Y. Inspection samples analyzed, 14.
- Daily Egg Scratch Feed, 2; only trace of oats present.
- Daily Growth Chick Starter, 1; equaled guaranty.
- Daily Growth Broiler Mash, 1; equaled guaranty.
- Daily Growth Growing Mash, 1; equaled guaranty.
- Daily Egg Laying Mash Feed, 1; equaled guaranty.
- Special Daily Egg Laying Mash Feed, 1; excess fiber.
- Daily Growth Turkey Grower, 1; excess fiber.
- "Daily Milk" 16% Protein Dairy Feed, 3; 1 no linseed oil meal found, excess screenings refuse present.

- Milky Way 20% Protein Dairy Feed, 1; no linseed oil meal found.
Milky Way 24% Protein Dairy Feed, 2; equaled guaranty.
- Aubrey & Co., Louisville, Ky. Inspection samples analyzed, 54.
- Red "A" Wheat Gray Shorts and Screenings, 1; equaled guaranty.
Rainbow Wheat Gray Shorts and Screenings, 1; excess fiber.
Red "A" Wheat Red Dog, 1; equaled guaranty.
Red "A" Wheat Feed and Screenings, 1; equaled guaranty.
Soft Wheat Mixed Feed and Screenings, 1; equaled guaranty.
Hominy Meal, 3; equaled guaranty.
Screened Cracked Corn, 1; equaled guaranty.
Red "A" Rolled Oats, 1; deficient in fat.
Aubrey's Ground Barley, 1; excess fiber.
Aubrey's 41% Protein Cottonseed Meal, 1; equaled guaranty.
Aubrey's 41% Protein Soybean Cake Meal, 1; equaled guaranty.
Red "A" 60% Protein Digester Tankage, 1; equaled guaranty.
Monarch Poultry Scratch Feed, 1; no kaffir corn or milo maize found.
Red "A" Poultry Scratch Feed, 1; equaled guaranty.
Red Bird Baby Chick Starting Mash (With Cod Liver Oil), 1; equaled guaranty.
Red Bird Growing Mash (With Cod Liver Oil), 2; no dried buttermilk found.
Red Bird Baby Chick Starting and Growing Mash (With Cod Liver Oil), 3; 2 excess fiber.
Red Star All-Mash Starter and Grower Broiler Ration, 1; equaled guaranty.
Rainbow Poultry Fattening Mash, 2; equaled guaranty.
Red Star Laying Mash, 5; 1 no charcoal found.
Red "A" Turkey Fattening Mash, 1; equaled guaranty.
Dandy Horse Feed, 2; 1 screenings refuse present tho not guaranteed.
Red "A" Horse Feed, 1; deficient in fat.
Supreme 95% Grain Horse Feed, 1; equaled guaranty.
Red "A" Sheep Feed, 2; 1 deficient in fat.
Red "A" 40% Protein Hog Supplement, 2; 1 deficient in fat, no fish meal found.
Rainbow Hog and Pig Feed, 3; 1 no charcoal found; 1 excess fiber, soybean oil meal present tho not guaranteed.
Alfalfa Meal, Oat Hull Feed and Molasses, 1; equaled guaranty.
Monarch 16½% Protein Dairy Feed, 5; 3 deficient in fat.
Dandy 20% Protein Dairy Feed, 1; equaled guaranty.
Supreme Brand 24% Protein Dairy Feed, 1; equaled guaranty.
Ful-O-Cream Brand 24% Protein Dairy Feed, 1; equaled guaranty.
Rainbow 34% Protein Dairy Supplement, 3; 2 deficient in protein.

- The Auburn Mills, Auburn, Ky. Inspection samples analyzed, 3.
Wheat Gray Shorts, 2; deficient in protein; corn meal present.
Mixed Feed, 1; equaled guaranty.
- Auburn Roller Mills, Auburn, Ky. Inspection samples analyzed, 4.
Corn By-product Feed, 2; equaled guaranty.
Mixed Feed, 2; deficient in protein.
- Aurora Flour & Feed Co., Aurora, Ind. Inspection samples analyzed, 7.
Dearborn Layer, 2; equaled guaranty.
Success Layer, 1; equaled guaranty.
Success 16% Protein Dairy Feed, 1; deficient in fat.
Dearborn 17% Protein Dairy Feed, 1; equaled guaranty.
Dearborn 20% Protein Dairy Feed, 1; equaled guaranty.
Dearborn 24% Protein Dairy Feed, 1; equaled guaranty.
- Ballard & Ballard Co., Louisville, Ky. Inspection samples analyzed, 40.
Ballard's Bran, 2; equaled guaranty.
Ballard's Kentucky Farm Feed and Screenings, 2; equaled guaranty.
Ballard's Wheat Mixed Feed and Screenings, 1; equaled guaranty.
Ground Oats, 2; deficient in fat.
41% Protein Cottonseed Meal, 1; equaled guaranty.
34% Protein Old Process Linseed Meal, 1; deficient in fat.
Insurance Growing Mash, 1; excess fiber.
Insurance Broiler Ration, 1; equaled guaranty.
Guardian Starting and Growing Mash, 2; excess fiber.
Insurance Starter and Grower, 2; equaled guaranty.
Ballard's Insurance Fattening Mash, 1; equaled guaranty.
Insurance Egg Mash, 1; equaled guaranty.
Guardian Laying Mash, 2; 1 excess fiber.
Insurance Turkey Growing Mash, 1; equaled guaranty.
Insurance Rabbit Ration, 1; equaled guaranty.
Balco Sweet Mule Feed, 3; 2 excess fiber; 1 excess oat hull feed present.
Insurance Hog Ration, 2; 1 excess fiber.
Sheep Insurance Feed, 1; equaled guaranty.
Insurance 16% Protein Sweet Dairy Feed, 1; equaled guaranty.
Balco 16% Protein Sweet Dairy Feed, 5; 2 deficient in protein; 2 deficient in fat; 1 excess fiber; 2 much excess fiber, adulterated with excess cottonseed hulls—misbranded.
Guardian 16% Protein Sweet Dairy Feed, 1; excess oat hull feed present.
Guardian 24% Protein Sweet Dairy Feed, 1; equaled guaranty.
"Milk Insurance" 24% Protein Sweet Dairy Feed, 5; 1 deficient in fat, no corn gluten feed found.
- Baltic Mills Co., Vincennes, Ind. Inspection sample of Hominy Feed analyzed, 1; equaled guaranty.

- Banner Mill Co., Greenville, Tenn. Inspection sample of Banner Mixed Feed analyzed, 1; equaled guaranty.
- Bardstown Mills, Bardstown, Ky. Inspection samples of Royal Mill Feed analyzed, 4; 1 deficient in protein; 1 deficient in fat, no corn bran found.
- Baughman Milling Co., Stanford, Ky. Inspection samples of Banner Mixed Feed analyzed, 2; deficient in protein.
- Beaver Dam Milling Co., Beaver Dam, Ky. Inspection samples analyzed, 4.
- Eureka Wheat Gray Shorts, 1; deficient in protein; corn product present.
- Shipstuff and Screenings, 3; 2 deficient in protein, wheat flour present.
- The Big Four Mills, Ltd., Covington, Ky. Inspection samples analyzed, 24.
- Hominy Feed, 1; equaled guaranty.
- Big Four Growing Mash, 2; 1 excess fiber.
- Big Four Laying Mash, 1; excess fiber.
- "Hi-Lo Brand" Egg Mash, 2; equaled guaranty.
- "Hi-Lo Brand" Horse Feed, 1; equaled guaranty.
- Big Four Horse Feed, 1; equaled guaranty.
- Big Four Hog Feed, 2; equaled guaranty.
- "Hi-Lo Brand" 16% Protein Dairy Feed, 2; equaled guaranty.
- "O. K. Brand" Special 16% Protein Dairy Feed, 2; ingredients not as guaranteed; misbranded; 1 deficient in fat.
- "O. K. Brand" Special 17% Protein Dairy Feed. 3; 1 deficient in fat.
- "Hi-Lo Brand" 24% Protein Dairy Feed, 4; 2 deficient in fat.
- Big Four 25% Protein Dairy Feed, 2; 1 deficient in fat.
- Big Four 32% Protein Dairy Supplement, 1; equaled guaranty.
- Binns Milling Co., Herndon, Ky. Inspection samples analyzed, 4.
- Eclipse Scratch Feed, 1; deficient in fat; only trace of oats present.
- Eclipse Mixed Feed, 1; equaled guaranty.
- Eclipse Hog Feed, 2; equaled guaranty.
- Bisbee Linseed Co., Chicago Hts., Ill. Inspection sample of Illinois Brand 30% Protein Linseed Meal and Screenings Oil Feed analyzed, 1; equaled guaranty.
- Blish Milling Co., Seymour, Ind. Inspection samples analyzed, 2.
- Woodstock Bran, 1; equaled guaranty.
- "Bulls Eye" Wheat Brown Middlings and Screenings, 1; equaled guaranty.
- Blue Grass Feed Co., Lexington, Ky. Inspection samples analyzed, 2.
- Eggmaker Laying Mash, 1; much deficient in protein; ground barley present tho not guaranteed.

- Peerless 20% Protein Dairy Feed, 1; much deficient in protein; no distillers dried grains found.
- Bowling Green Milling Co., Bowling Green, Ky. Inspection samples analyzed, 9.
- Monroe's Wheat Gray Shorts and Screenings, 1; deficient in protein and fat; wheat flour present.
- Mixed Feed, 1; equaled guaranty.
- Rice Bran, 1; equaled guaranty.
- "Ideal Brand" Feed, 2; 1 deficient in protein; 1 deficient in fat.
- Pork Maker (Fattening), 4; 2 deficient in protein; 2 deficient in fat; 1 excess fiber; 1 wheat bran present tho not guaranteed; 1 no rice bran found.
- Bowling Green Sweet Feed Mill Co., Bowling Green, Ky. Inspection samples analyzed, 7.
- "Home Made" Growing Mash, 1; alfalfa meal present tho not guaranteed; only trace of oats present.
- "Ace Brand" 16% Protein Dairy Feed, 4; 1 deficient in fat; 1 excess cottonseed hulls present.
- "Ace B. G. Brand" 16% Protein Dairy Feed, 2; 1 deficient in protein, no ground oats found, excess cottonseed hulls present —misbranded; 1 deficient in fat, wheat product present tho not guaranteed.
- Broadway Roller Mills, Bowling Green, Ky. Inspection sample of Mixed Feed analyzed, 1; equaled guaranty.
- The Brode Corporation, Memphis, Tenn. Inspection samples analyzed, 6.
- "Owl Brand" 41% Protein Cottonseed Meal, 3; 1 deficient in protein.
- "Owl Brand" 43% Protein Cottonseed Meal, 3; equaled guaranty.
- Chas. Broeker & Co., Owensboro, Ky. Inspection samples analyzed, 6.
- Hominy Feed, 2; equaled guaranty.
- "Indian Head" Scratch Feed, 2; 1 no milo or kaffir corn found.
- XX Mixed Feed, 2; deficient in fat; 1 no hominy feed found.
- Browder Milling Co., Fulton, Ky. Inspection samples analyzed, 6.
- Wheat Bran and Screenings, 1; equaled guaranty.
- Mixed Feed, 1; equaled guaranty.
- Mineral Mixture, 1; equaled guaranty.
- "Hog's Delight" Sweet Feed, 1; equaled guaranty.
- 16% Protein Sweet Dairy Feed, 1; no salt found.
- "Big Sixteen" Dairy Feed, 1; deficient in fat; soybean oil meal present tho not guaranteed.
- The Buckeye Cotton Oil Co., Cincinnati, O. Inspection samples of Buckeye 41% Protein Cottonseed Meal analyzed, 2; equaled guaranty.

- Buffalo Roller Mills, Buffalo, Ky. Inspection sample of "Sea Foam Brand" Wheat Mixed Feed and Screenings analyzed, 1; deficient in protein and fat; corn product present.
- Buhner Fertilizer Co., Seymour, Ind. Inspection sample of Buhner's Feeding Bone analyzed, 1; equaled guaranty.
- Bundy Bros. Mill Co., Medora, Ind. Inspection samples analyzed, 10.
Hominy Feed, 4; equaled guaranty.
Medora Scratch Feed, 1; deficient in protein; no milo or barley found.
Medora Intermediate Scratch Feed, 1; equaled guaranty.
Medora Fattening Mash, 1; equaled guaranty.
Jumbo Laying Mash, 2; 1 deficient in protein, no soybean oil meal found; 1 no linseed oil meal found.
Combination Stock Feed, 1; equaled guaranty.
- Burnside Milling Co., Burnside, Ky. Inspection samples of Mixed Feed analyzed, 2; much deficient in protein; excess corn product present.
- Cadick Milling Co., Grandview, Ind. Inspection samples analyzed, 3.
Wheat Mixed Feed, 2; equaled guaranty.
Shipstuff, 1; deficient in protein; wheat flour present.
- Cadiz Milling Co., Cadiz, Ky. Inspection sample of Sunbeam Wheat Mixed Feed and Screenings analyzed, 1; deficient in protein; wheat flour present.
- Calhoun Sweet Feed Co., Calhoun, Ky. Inspection sample of "Golden Rule" Laying Mash analyzed, 1; equaled guaranty.
- Campbellsville Milling Co., Campbellsville, Ky. Inspection sample of Wheat Mixed Feed and Screenings analyzed, 1; deficient in protein; wheat flour present.
- Caneyville Roller Mills Co., Caneyville, Ky. Inspection sample of Mixed Feed analyzed, 1; deficient in protein and fat; no corn bran found.
- Cape County Milling Co., Jackson, Mo. Inspection sample of Capco Wheat Gray Shorts and Screenings analyzed, 1; equaled guaranty.
- Chemical Products Corporation, Cincinnati, O. Inspection samples analyzed, 2.
Abattoir Brand 50% Protein Regular Meat and Bone Scraps, 1; deficient in protein.
Abattoir Brand 60% Protein Digester Tankage, 1; equaled guaranty.
- The Cincinnati Grain & Hay Co., Cincinnati, O. Inspection samples analyzed, 11.
34% Protein Linseed Oil Meal, 1; deficient in fat.
"No Better" Poultry Scratch Feed, 1; no buckwheat present.

"No Better" Starting Mash, 1; excess fiber; ingredients not as guaranteed; misbranded.

"No Better" Horse and Mule Feed, 1; deficient in protein.

"No Better" Hog Ration, 1; much excess fiber; ingredients not as guaranteed; misbranded.

Standard Brand 16% Protein Dairy Sweets, 3; no cottonseed meal found; 2 soybean oil meal present tho not guaranteed; 1 deficient in fat, no corn gluten feed found; 1 much deficient in protein and fat, screenings refuse substituted for oat hull feed, misbranded.

"No Better" Sweet Dairy Feed, 1; much deficient in protein; no cottonseed meal or linseed oil meal found; misbranded.

"No Better" 25% Protein Dry Dairy Ration, 2; deficient in protein; 1 much deficient in protein and fat, no linseed oil meal found, molasses present tho not guaranteed—misbranded.

Citizens Milling Co., Somerset, Ky. Inspection sample of Cumberland Mixed Feed analyzed, 1; deficient in protein.

City Mills, Rineyville, Ky. Inspection samples of "Perfection Brand" Mixed Feed analyzed, 2; equaled guaranty.

Climax Roller Mills, Shelbyville, Ky. Inspection sample of Climax Wheat Brown Shorts analyzed, 1; deficient in protein and fat; wheat flour present.

E. A. Cohen, Greenville, Ky. Inspection samples analyzed, 4.

"Pride of Muhlenberg" 24% Protein Dairy Feed, 3; much deficient in protein; misbranded; 1 cottonseed meal, linseed oil meal and soybean oil meal present tho not guaranteed.

"Pride of Muhlenberg" 27% Protein Dairy Feed, 1; no calcium carbonate found; bone meal present.

Clell Coleman & Sons, Burgin, Ky. Inspection samples of "Coleman's Favorite" Mixed Feed, 4; 1 deficient in protein; 2 no corn bran found.

Columbia Milling Co., Columbia, Ky. Inspection sample of "Dividend" Feed analyzed, 1; deficient in protein.

Community Flour Mill, Greenup, Ky. Inspection sample of Bestyet Brand Mixed Feed analyzed, 1; deficient in protein; wheat flour present.

Community Milling Co., Irvington, Ky. Inspection samples of Soft Wheat Mixed Feed analyzed, 5; 3 deficient in protein, wheat flour present.

The G. E. Conkey Co., Cleveland, O. Inspection sample of Conkey's All-Mash Chick Ration (With Cod Liver Oil) analyzed, 1; ground oats present tho not guaranteed.

Consolidated Products Co., Danville, Ill. Inspection sample of Semi-Solid Buttermilk analyzed, 1; deficient in fat.

- Cornishville Milling Co., Cornishville, Ky. Inspection sample of Mixed Feed analyzed, 1; deficient in protein; wheat flour present.
- Corn Products Refining Co., New York, N. Y. Inspection samples analyzed, 2.
- Corn Gluten Feed, 1; equaled guaranty.
- Corn Gluten Meal, 1; equaled guaranty.
- Crescent Mills, Cynthiana, Ky. Inspection sample of Crescent Mixed Feed analyzed, 1; deficient in protein; wheat flour present.
- Crescent Roller Mills Co., Taylorsville, Ky. Inspection sample of Crescent Mixed Feed analyzed, 1; deficient in protein and excess fiber; excess corn bran present.
- Crofton Milling Co., Crofton, Ky. Inspection samples of Richfeed analyzed, 2; deficient in protein; ground wheat present; 1 deficient in fat.
- Crown Jewel Milling Co., Cynthiana, Ky. Inspection sample of Mixed Feed analyzed, 1; no corn bran found.
- The Denver Alfalfa Milling & Products Co., Lamar, Colo. Inspection samples analyzed, 5.
- "Leafalfa Brand" Alfalfa Leaf Meal, 1; deficient in protein.
- "Leafalfa Brand" Dehydrated Alfalfa Leaf Meal, 1; equaled guaranty.
- Triple XXX Alfalfa Meal, 2; equaled guaranty.
- Triple XXX Dehydrated Alfalfa Meal, 1; equaled guaranty.
- W. C. Dicken, Mentor, Ky. Inspection samples analyzed, 4.
- "Sunny Grain Brand" Chick Starter, 1; no rolled oats or dried buttermilk found.
- "Sunny Grain Brand" Chick Grower, 1; equaled guaranty.
- "Sunny Grain Brand" Laying Mash, 1; excess fiber.
- "Sunny Grain Brand" 24% Protein Dairy Feed, 1; equaled guaranty.
- Dixie Mills Co., E. St. Louis, Ill. Inspection samples analyzed, 13.
- Dixie Starter and Grower Mash, 1; equaled guaranty.
- Dixie All-Mash, 1; equaled guaranty.
- Dixie Laying Mash, 1; equaled guaranty.
- Dixie Egg Mash, 2; equaled guaranty.
- Dixota Brand Horse and Mule Feed, 1; excess fiber.
- "Holsum Brand" Horse and Mule Feed, 1; deficient in fat and excess fiber.
- Dixie 15% Protein Hog Feed, 1; deficient in fat.
- "Holsum Brand" 16½% Protein Dairy Feed, 2; 1 deficient in fat; 1 excess fiber.
- Dixie 24% Protein Dairy Feed, 3; equaled guaranty.
- G. H. Dulle Milling Co., Jefferson City, Mo. Inspection sample of Red, White and Blue Wheat Middlings and Screenings analyzed, 1; deficient in protein and excess fiber.

- Dunlop Milling Co., Clarksville, Tenn. Inspection sample of Wheat Bran and Screenings analyzed, 1; equaled guaranty.
- Dutschke Milling Co., Cannelton, Ind. Inspection samples analyzed, 2. Shipstuff and Screenings, 1; deficient in protein; wheat flour present.
- "Big Hen" Mash, 1; equaled guaranty.
- Dyersburg Oil Mill, Dyersburg, Tenn. Inspection samples of Dyersburg Oil Mill 41% Protein Cottonseed Meal analyzed, 2; equaled guaranty.
- The Early & Daniel Co., Cincinnati, O. Inspection samples analyzed, 42.
- Alfalfa Leaf Meal, 1; equaled guaranty.
- Tuxedo Wheat Gray Middlings and Screenings, 1; equaled guaranty.
- 41% Protein Soybean Oil Meal, 1; equaled guaranty.
- Tuxedo Developer Grains, 1; equaled guaranty.
- Tuxedo Starting and Growing All-Mash, 2; 1 excess fiber, no dried milk products found.
- Tuxedo Growing and Developing Mash, 1; no dried buttermilk found.
- Tuxedo Starter-Grower-Developer Mash, 2; 1 excess fiber.
- Tuxedo Egg Mash, 3; equaled guaranty.
- Tuxedo Special Egg Mash 20% Protein, 3; equaled guaranty.
- Tuxedo Supplement Mash, 1; equaled guaranty.
- Tuxedo Turkey Growing and Developing Mash, 1; no dried milk products found.
- Tuxedo Chop, 1; equaled guaranty.
- Tuxedo Sheep Feed, 1; deficient in protein.
- Tuxedo Porkmaker, 1; equaled guaranty.
- Tuxedo Pig Meal, 3; equaled guaranty.
- Tuxedo Hog Ration, 19% Protein, 1; equaled guaranty.
- Tuxedo Big Forty Supplement, 2; equaled guaranty.
- Tuxedo 16% Protein Dairy Feed, 2; 1 deficient in fat; 1 excess fiber.
- Tuxedo Special 16% Protein Dairy Feed, 4; equaled guaranty.
- Tuxedo Dairy 20% Protein, 3; equaled guaranty.
- Tuxedo Special 20% Protein Dairy Feed, 1; deficient in fat.
- Tuxedo 24% Protein Dairy Feed, 5; equaled guaranty.
- Tuxedo Special 24% Protein Dairy Feed, 1; equaled guaranty.
- Edwards Milk Products Co., Chicago, Ill. Inspection sample of Yankee Brand Dried Buttermilk analyzed, 1; equaled guaranty.
- The F. L. Emmert Co., Cincinnati, O. Inspection sample of Buffalo Brand Brewers Dried Grains analyzed, 1; equaled guaranty.
- John W. Eshelman & Sons, Lancaster, Pa. Inspection samples analyzed, 14.

- Eshelman Red Rose Growing Mash (With Cod Liver Oil), 1; equaled guaranty.
- Eshelman Red Rose All-Mash Starter, 1; equaled guaranty.
- Eshelman Red Rose All-Mash Starter and Grower (With Cod Liver Oil), 1; equaled guaranty.
- Eshelman Red Rose Laying Mash, 1; equaled guaranty.
- Eshelman Maintenance 20% Protein Laying Mash, 1; equaled guaranty.
- Eshelman Red Rose Pig and Hog Meal, 1; excess fiber.
- Red Cow 16% Protein Dairy Feed, 1; deficient in fat.
- Eshelman Pennsy 16% Protein Dairy Feed, 2; 1 corn gluten meal substituted for corn gluten feed.
- Eshelman Red Rose 20% Protein Dairy Feed, 1; equaled guaranty.
- Eshelman Red Rose 24% Protein Dairy Feed, 1; equaled guaranty.
- Challenge 24% Protein Dairy Feed, 2; 1 excess fiber.
- Eshelman 32% Protein Mixing Ration (Supplement), 1; equaled guaranty.
- Excelsior Milling Co., Minneapolis, Minn. Inspection sample of Camel Fancy Brand Wheat Mixed Feed and Screenings analyzed, 1; equaled guaranty.
- Farmers Cooperative Elevator Co., Seymour, Ind. Inspection sample of Apex Hominy Feed analyzed, 1; equaled guaranty.
- Farmers Mill, Clay, Ky. Inspection sample of Winter Wheat Gray Shorts and Screenings analyzed, 1; excess fiber.
- Farmers Mill Co., Columbia, Ky. Inspection sample of Shipstuff analyzed, 1; deficient in protein; wheat flour present.
- Farmers Milling Co., Tompkinsville, Ky. Inspection sample of Wheat Bran and Shorts analyzed, 1; equaled guaranty.
- Farmers & Merchants Milling Co., Brooksville, Ky. Inspection sample of Wheat Mixed Feed and Screenings analyzed, 1; deficient in protein.
- J. H. Fedders' Son, Covington, Ky. Inspection samples of Hominy Feed analyzed, 2; equaled guaranty.
- Ferncliff Feed & Grain Co., Louisville, Ky. Inspection samples analyzed, 15.
- Cracker Jack Corn Feed Meal, 1; equaled guaranty.
- Cracker Jack Brewers Dried Grains, 1; equaled guaranty.
- P. D. Q. Starting and Growing Mash, 1; excess fiber; no soybean oil meal found.
- P. D. Q. 18% Protein Egg Mash, 2; 1 excess fiber.
- P. D. Q. Egg Mash, 1; equaled guaranty.
- Cracker Jack Special Feed No. 2, 1; equaled guaranty.
- P. D. Q. 16% Protein Dairy Feed, 3; equaled guaranty.
- P. D. Q. 24% Protein Dairy Feed, 2; equaled guaranty.
- Ferncliff 24% Protein Dairy Ration, 2; equaled guaranty.

- Cracker Jack 24% Protein Sweet Dairy Ration, 1; equaled guaranty.
- Field Packing Co., Owensboro, Ky. Inspection sample of Field's 50% Protein Crackling Tankage analyzed, 1; equaled guaranty.
- Henry Fischer Packing Co., Louisville, Ky. Inspection samples analyzed, 5.
- 50% Protein Ground Cracklings, 1; equaled guaranty.
- Mellwood Brand 60% Protein Digester Tankage, 4; equaled guaranty.
- Flaherty Roller Mills Co., Vine Grove, Ky. Inspection samples analyzed, 2.
- Flavo Starting Mash, 1; equaled guaranty.
- Flavo Egg Mash, 1; deficient in protein.
- Flemingsburg Hatchery, Flemingsburg, Ky. Inspection sample of Paymaster All-Mash Starting and Growing Ration analyzed, 1; equaled guaranty.
- Flemingsburg Mills, Flemingsburg, Ky. Inspection samples analyzed, 2.
- All-Mash Poultry Ration, 1; no milk products found; peanut oil meal present tho not guaranteed.
- Supreme Brand 18% Protein Laying Mash, 1; equaled guaranty.
- Henry Fruechtenicht, Louisville, Ky. Inspection samples analyzed, 2.
- Ground Oats, 1; equaled guaranty
- Producer 16% Protein Dairy Feed, 1; equaled guaranty.
- Fuhrer-Ford Milling Co., Mt. Vernon, Ind. Inspection sample of Wheat Gray Shorts and Screenings analyzed, 1; equaled guaranty.
- Garden Street Mill & Elevator Co. (Aubrey & Co.), Louisville, Ky. Inspection samples of "Garden Brand" 16% Protein Dairy Feed analyzed, 5; 2 deficient in fat; 1 no soybean oil meal found; 1 screenings refuse present tho not guaranteed; 1 whole oats present tho not guaranteed.
- Garrard Mills, Lancaster, Ky. Inspection sample of Glen Lily Mixed Feed analyzed, 1; deficient in protein; excess ground corn present.
- General Mills, Minneapolis, Minn. Inspection sample of Pittsburg Brand Feed and Screenings analyzed, 1; equaled guaranty.
- Georgia Distributing Co., Atlanta, Ga. Inspection samples of "Gold Dust Brand" 41% Protein Cottonseed Meal analyzed, 3; 2 deficient in protein; 1 excess fiber.
- Germantown Milling Co., Germantown, Ky. Inspection sample of Wheat Mixed Feed analyzed, 1; deficient in protein and fat.
- Glasgow Milling Co., Glasgow, Ky. Inspection sample of Mixed Feed analyzed, 1; deficient in protein; excess corn product present.
- Glass Milling Co., Wilmore, Ky. Inspection sample of Bouquet Mixed Feed analyzed, 1; equaled guaranty.

Glenmore Distilleries Co., Inc., Owensboro, Ky. Inspection samples of Glenmore Distillers Corn Dried Grains analyzed, 2; equaled guaranty.

The Glidden Co., Chicago, Ill. Inspection samples of "Glidden 4-Hi Diamond G Brand" New Process 44% Protein Soybean Oil Meal analyzed, 2; equaled guaranty.

Edw. F. Goeke Sons, Evansville, Ind. Inspection samples analyzed, 9.

"New Deal" All-Mash, 2; excess fiber.

A-1 All-Mash (With Cod Liver Oil), 1; equaled guaranty.

"Eg-go" Egg Ration, 1; much deficient in protein.

"Big Gee" Hog Feed, 1; deficient in protein.

"New Deal" 16% Protein Dairy Ration, 4; excess fiber; 2 deficient in protein and fat.

Goldcamp Mill Co., Ironton, O. Inspection samples analyzed, 5.

G. M. C. Feed, 1; equaled guaranty.

"Egg-O-Brand" Laying Mash, 1; excess fiber; ingredients not as guaranteed; adulterated and misbranded.

Pig and Hog Grower, 1; equaled guaranty.

"Gold-Co" 16% Protein Dairy Feed, 2; 1 deficient in protein, no ground oats, malt sprouts or distillers dried grains found—misbranded.

Grayson Milling Co., Grayson, Ky. Inspection samples analyzed, 7.

Ground Wheat, 1; deficient in fat.

"K-Y Brand" Stock Feed, 3; deficient in fat.

"K-Y Brand" 16½% Protein Dairy Feed, 1; equaled guaranty.

"K-Y Brand" Sweet 16% Protein Dairy Feed, 1; equaled guaranty.

"K-Y Brand" 24% Protein Dairy Feed, 1; deficient in protein; soybeans substituted for soybean oil meal.

Green River Milling Co., S. Carrollton, Ky. Inspection samples analyzed, 3.

Wheat Mixed Feed and Screenings, 2; equaled guaranty.

Green River Mixed Feed, 1; deficient in protein.

Gwinn Bros. & Co., Huntington, W. Va. Inspection samples analyzed, 5.

Wheat Brown Middlings and Screenings, 2; 1 deficient in protein; wheat flour present.

Early Lay Egg Mash, 1; deficient in fat and excess fiber; no dried buttermilk found; soybean oil meal present tho not guaranteed.

"Grade A" 24% Protein Dairy Feed, 2; 1 calcium carbonate present tho not guaranteed.

The Gwinn Milling Co., Columbus, O. Inspection samples of Gwinn's Wheat Feed and Screenings analyzed, 2; equaled guaranty.

- Hales & Hunter Co., Chicago, Ill. Inspection samples analyzed, 17.
Morning Glory Chick Starter, 1; equaled guaranty.
Red Comb Chick Starter, 1; equaled guaranty.
Morning Glory Growing Mash, 1; equaled guaranty.
Red Comb Growing Mash, 1; equaled guaranty.
Red Comb Crate Fattener, 2; deficient in fat.
Red Comb Egg Mash, 3; equaled guaranty.
Morning Glory Egg Mash, 1; corn gluten meal present tho not guaranteed.
Red Comb Turkey Grower, 1; corn gluten meal present tho not guaranteed.
Red Comb Turkey Grower and Fattener, 1; linseed oil meal present tho not guaranteed.
Oat Hull Feed, 1; equaled guaranty.
Excelsior Horse Feed, 1; no ground barley found.
"Kingfalfa Brand" Horse Feed, 1; no ground barley found.
Gold Flake 16% Protein Dairy Feed, 1; deficient in fat; no ground corn found.
Red Horn 24% Protein Dairy Feed, 1; equaled guaranty.
- Arnold Hansford, Somerset, Ky. Inspection sample of Hansford's Wheat Mixed Feed and Screenings analyzed, 1; deficient in protein
- Hanson Roller Mills, Hanson, Ky. Inspection samples of "White Frost" Wheat Mixed Feed and Screenings analyzed, 3; 1 deficient in protein; wheat flour present.
- R. L. Harrison & Son, Bagdad, Ky. Inspection samples analyzed, 2.
Harrison's Wheat Mixed Feed and Screenings, 1; equaled guaranty.
Harrison's 24% Protein Dairy Feed, 1; deficient in protein and fat.
- The P. H. Harsha Milling Co., Portsmouth, O. Inspection samples analyzed, 4.
Purity Brand Hominy Feed, 1; deficient in fat.
Magnolia Mixed Feed, 1; equaled guaranty.
Special 16% Protein Dairy Feed, 2; equaled guaranty.
- Edwin C. Hawkins, Paducah, Ky. Inspection samples analyzed, 2.
Wheat Bran and Screenings, 1; equaled guaranty.
Topsy Laying Mash, 1; equaled guaranty.
- G. M. Haycraft & Son, Leitchfield, Ky. Inspection samples analyzed, 2.
"Grayson County" Laying Mash, 1; equaled guaranty.
Haycraft's "Summer" Laying Mash, 1; equaled guaranty.
- Haydon Mill & Grain Co., Springfield, Ky. Inspection samples analyzed, 4.
Economy Feed, 1; deficient in protein.

- "Economy Brand" Starting Mash, 1; equaled guaranty.
"Grow Quick" Growing Mash, 1; equaled guaranty.
"Lay Quick" Economy Laying Mash, 1; equaled guaranty.
- Henderson Elevator Co., Henderson, Ky. Inspection samples analyzed, 3.
Bullitt's All-Purpose Poultry Mash, 1; equaled guaranty.
Bullitt's Special 16% Protein Dairy Feed, 1; equaled guaranty.
Bullitt's 24% Protein Dairy Feed, 1; deficient in protein and fat.
- Henderson Feed & Commission Co., Henderson, Ky. Inspection sample of "Lay 'Em" Scratch Feed analyzed, 1; deficient in fat; no milo found.
- Hermitage Feed Mills, Nashville, Tenn. Inspection sample of "Big Pig" 40% Protein Hog Supplement analyzed, 1; no milk products found.
- V. E. Herter & Co., Dayton, O. Inspection samples analyzed, 9.
Economy Growing Mash, 1; no dried buttermilk found; corn gluten feed and peanut oil meal present tho not guaranteed.
Eagle Starting and Growing All-Mash, 1; excess fiber.
Yankee Laying Mash, 1; equaled guaranty.
Yankee Horse Feed, 1; excess fiber.
Economy 16% Protein Dairy Feed, 4; 2 deficient in fat.
Eagle 24% Protein Dairy Feed, 1; equaled guaranty.
- Hickman Manufacturing & Feed Co., Hickman, Ky. Inspection sample of Corn Bran analyzed, 1; excess fiber.
- Higginsville Flour Mill, Higginsville, Mo. Inspection sample of Wheat Gray Shorts and Screenings analyzed, 1; excess fiber.
- Hodgenville Roller Mills, Hodgenville, Ky. Inspection sample of Lincoln Wheat Mixed Feed analyzed, 1; equaled guaranty.
- Home Milling Co., Greenville, Ky. Inspection samples of Happy Home Mixed Feed analyzed, 3; 1 no corn bran found.
- Hook Milling Co., Hardinsburg, Ky. Inspection samples of "White Swan" Wheat Mixed Feed analyzed, 2; deficient in protein; corn bran present.
- Hopkinsville Milling Co., Hopkinsville, Ky. Inspection samples analyzed, 3.
Hominy Feed, 1; excess fiber.
Sunflower Wheat Gray Shorts and Screenings, 2; deficient in protein and excess fiber; misbranded.
- Horse Cave Mills, Horse Cave, Ky. Inspection sample of "Superior Brand" Mixed Feed analyzed, 1; deficient in protein; excess corn product present.
- Humphreys-Godwin Co., Memphis, Tenn. Inspection sample of "Dixie Brand" 41% Protein Cottonseed Meal analyzed, 1; deficient in protein.

- Igleheart Bros., Evansville, Ind. Inspection samples analyzed, 4.
Winter Wheat Gray Shorts and Screenings, 2; 1 deficient in protein.
Wheat Mixed Feed and Screenings, 2; equaled guaranty.
- Illinois Cereal Mills, Inc., Paris, Ill. Inspection sample of 12% Protein Hominy Feed analyzed, 1; deficient in protein and fat.
- J. F. Imbs Milling Co., Belleville, Ill. Inspection samples analyzed, 2.
"Charm" Wheat Gray Shorts and Screenings, 1; equaled guaranty.
"Charm" Wheat Mixed Feed and Screenings, 1; equaled guaranty.
- Indiana Meat Products Co., New Albany, Ind. Inspection sample of 60% Protein Digester Tankage analyzed, 1; deficient in fat.
- J. E. M. Milling Co. (Lexington Roller Mills Co.), Frankfort, Ky. Inspection samples analyzed, 6.
Capitol Egg Mash, 1; equaled guaranty.
Capitol 16% Protein Dairy Feed, 3; 1 deficient in protein.
Capitol 24% Protein Dairy Feed, 2; equaled guaranty.
- Joy Milling Co., Elkton, Ky. Inspection sample of Mixed Feed analyzed, 1; deficient in protein; excess corn product present.
- Kansas Milling Co., Wichita, Kansas. Inspection sample of Wheat Gray Shorts and Screenings analyzed, 1; deficient in protein and fat; wheat flour present.
- Kasco Mills, Toledo, O. Inspection samples analyzed, 18.
Kasco Growing Mash, 1; no milk products found.
Apex Starter and Grower, 1; deficient in protein and excess fiber.
Kasco All-Mash Chick Starter, 1; equaled guaranty.
Apex Complete Grower All-Mash, 1; equaled guaranty.
Kasco Laying Mash, 1; equaled guaranty.
Oc-Sak Laying Mash, 1; deficient in protein; corn gluten meal present tho not guaranteed.
Kasco Farm Feed, 2; 1 deficient in fat.
Apex Sweet Chop, 1; excess fiber; corn gluten meal and soybean oil meal present tho not guaranteed.
Kasco Calf Meal, 1; equaled guaranty.
Oc-Sak Hog Meal, 1; excess fiber; molasses present tho not guaranteed.
Oc-Sak Roughage Ration, 1; much excess fiber; oat hull feed present tho not guaranteed; misbranded.
Kasco Sweet 16% Protein Dairy Feed, 4; 1 no oat hull feed found; 1 excess screenings refuse present.
Oc-Sak 24% Protein Dairy Feed, 2; 1 corn meal present tho not guaranteed.
- Keco Milling Co., McKenzie, Tenn. Inspection samples analyzed, 4.
41% Protein Cottonseed Meal, 1; equaled guaranty.
"Thrifty Brand" Hog Fatner, 1; equaled guaranty.

- Keco Pig and Hog Feed, 1; no linseed oil meal found.
Keco 24% Protein Dairy Feed, 1; equaled guaranty.
- Kentucky Chemical Industries, Cincinnati, O. Inspection samples analyzed, 2.
"K-C Special" 50% Protein Meat and Bone Scraps, 1; equaled guaranty.
"K-C" 60% Protein Digester Tankage, 1; deficient in protein.
- Kentucky Milling Co. (Acme Mills), Hopkinsville, Ky. Inspection samples analyzed, 4.
"Gold Bar Brand" Chick Grains, 1; no milo found; ground oats present tho not guaranteed.
"Silver Bar Brand" 16% Protein Dairy Feed, 3; 1 excess fiber.
- F. W. Kibler Milling Co., Mt. Orab, O. Inspection samples of Kibler's Egg Mash analyzed, 2; 1 soybean oil meal and salt present tho not guaranteed.
- Kroger Grocery and Baking Co., Cincinnati, O. Inspection samples analyzed, 14.
Wesco Scratch Feed, 1; equaled guaranty.
Wesco Starting and Growing Mash, 3; 1 excess fiber.
Wesco Egg Mash, 2; equaled guaranty.
Wesco 16% Protein Dairy Feed, 5; 1 ground corn present tho not guaranteed.
Wesco 20% Protein Dairy Feed, 1; ground corn present tho not guaranteed.
Wesco 24% Protein Dairy Feed, 2; 1 no ground oats or corn gluten feed found.
- Lafayette Milling Co., Lafayette, Ky. Inspection sample of Wheat Mixed Feed analyzed, 1; deficient in protein and fat; wheat flour present.
- Lake County Oil Mill, Tiptonville, Tenn. Inspection samples of 41% Protein Cottonseed Meal analyzed, 3; 1 deficient in protein and excess fiber.
- Lancaster Milling Co., Lancaster, Ky. Inspection samples analyzed, 4.
Lamico Brand All-Mash Starting and Growing Feed, 1; deficient in protein and fat; wheat flour present tho not guaranteed.
Lamico Brand Mixed Feed, 1; deficient in protein; ground oats present tho not guaranteed.
"Choice Brand" 16% Protein Dairy Feed, 1; no distillers dried grains found; excess screenings present.
24% Protein Dairy Feed, 1; much deficient in protein; ground soybeans substituted for soybean oil meal; misbranded.
- Lane Lumber & Milling Co., Rowletts, Ky. Inspection sample of Corn By-Product Feed analyzed, 1; excess fiber.
- The Larabee Flour Mills Co., Kansas City, Mo. Inspection samples analyzed, 3.

- "Sunfed" Winter Wheat Bran and Screenings, 1; equaled guaranty.
- "Sunfed" Winter Wheat Gray Shorts and Screenings, 1; equaled guaranty.
- "Sunfed" Winter Wheat Mixed Feed and Screenings, 1; equaled guaranty.
- Larmon Milling Co., Woodburn, Ky. Inspection samples of Larmon's Wheat Mixed Feed analyzed, 2; 1 deficient in protein, corn product present.
- The Larrowe Milling Co., Detroit, Mich. Inspection samples analyzed, 9.
- Dried Beet Pulp, 1; equaled guaranty.
- Larro Chick Builder, 1; equaled guaranty.
- Larro Egg Mash, 2; equaled guaranty.
- Larro Pig Builder, 1; equaled guaranty.
- Larro 16% Protein Dairy Feed, 1; equaled guaranty.
- Larro The Ready Ration for Dairy Cows, 20% Protein, 2; equaled guaranty.
- Larrowe's 32% Protein Dairy Feed (Supplement), 1; equaled guaranty.
- Lawrenceburg Roller Mills Co., Lawrenceburg, Ind. Inspection samples analyzed, 2.
- "Snowflake" Wheat Bran and Screenings, 1; equaled guaranty.
- Town Talk Flour Middlings and Screenings, 1; deficient in protein.
- Lewisport Mill Co., Lewisport, Ky. Inspection samples of "Farmers Choice" Feed analyzed, 2; 1 deficient in protein, wheat bran present tho not guaranteed.
- Lexington Roller Mills Co., Lexington, Ky. Inspection samples analyzed, 15.
- Thoroughbred Mill Feed, 2; equaled guaranty.
- Kentucky Queen Growing and Developing Mash, 1; no corn gluten feed or ground barley found.
- Kentucky Queen Starting and Growing All-Mash, 1; deficient in fat.
- Kentucky Queen Crate Fattener, 1; deficient in fat.
- Kentucky Queen Turkey Starting Mash, 1; equaled guaranty.
- Kentucky Queen Turkey Growing Mash, 2; deficient in fat; corn gluten meal present tho not guaranteed.
- "Bossie" Feed, 2; 1 deficient in fat, no distillers dried grains found, soybean oil meal present tho not guaranteed.
- Thoroughbred Sheep Feed, 1; equaled guaranty.
- Thoroughbred 20% Protein Dairy Feed, 1; equaled guaranty.
- Thoroughbred 24% Protein Dairy Feed, 3; equaled guaranty.

- G. W. Lofton & Son, Providence, Ky. Inspection samples of Lofton's Mixed Feed analyzed, 2; 1 deficient in protein; excess corn product present.
- Loretto Mill Co., Loretto, Ky. Inspection sample of Shipstuff and Screenings analyzed, 1; deficient in protein; corn bran present.
- The Loudonville Milling Co., Loudonville, O. Inspection sample of Soft Winter Wheat Middlings and Screenings analyzed, 1; equaled guaranty.
- Louisa Supply Co., Louisa, Ky. Inspection samples of Standard Feed analyzed, 2; 1 excess fiber.
- Louisville Cereal Mill Co., Louisville, Ky. Inspection samples analyzed, 7.
Nonesuch Hominy Feed, 4; equaled guaranty.
Nonesuch Feed, 3; 1 deficient in protein.
- Louisville Mineral Products Co., Louisville, Ky. Inspection sample of "Success Brand" 16% Protein Dairy Feed analyzed, 1; deficient in protein and fat and excess fiber; excess cottonseed hulls present; misbranded.
- Louisville Provision Co., Louisville, Ky. Inspection samples of Luproco 50% Protein Digester Tankage analyzed, 2; 1 deficient in protein.
- L. B. Lovitt & Co., Memphis, Tenn. Inspection samples of Lovitt Brand 41% Protein Cottonseed Meal analyzed, 4; 1 deficient in protein.
- Lyon & Greenleaf Co., Ligonier, Ind. Inspection sample of Waseo Wheat Gray Middlings analyzed, 1; equaled guaranty.
- Madison Flour Mills, Madison, Ind. Inspection sample of Wheat Brown Middlings analyzed, 1; deficient in protein; wheat flour present.
- Magnolia Roller Mills, Magnolia, Ky. Inspection sample of Mill Run Feed analyzed, 1; equaled guaranty.
- S. M. Marcum & Bro., Sulphur Well, Ky. Inspection sample of Mixed Feed analyzed, 1; equaled guaranty.
- Marianna Sales Co., Memphis, Tenn. Inspection samples of "White Mule" 41% Protein Cottonseed Meal analyzed, 6; 1 deficient in protein.
- Marion Milling Co., Inc., Marion, Ky. Inspection sample of "Feeders Favorite" Mixed Feed analyzed, 1; deficient in protein and excess fiber; screenings refuse present; misbranded.
- Markin Feed Co., Ironton, O. Inspection sample of Standard Feed and Screenings analyzed, 1; equaled guaranty.
- Mayfield Sweet Feed Mill, Mayfield, Ky. Inspection sample of Mayfield Hog Feed analyzed, 1; equaled guaranty.
- McCarley & Richardson, Russellville, Ky. Inspection sample of Corn Bran analyzed, 1; equaled guaranty.

- McKenzie Milling Co., McKenzie, Tenn. Inspection sample of Wheat Gray Shorts and Screenings analyzed, 1; equaled guaranty.
- McMillen Feed Mills, Inc., Ft. Wayne, Ind. Inspection sample of "Master Mix" Blending Feed (Supplement) analyzed, 1; equaled guaranty.
- The Mennel Milling Co., Toledo, O. Inspection sample of Memo Wheat Gray Middlings and Screenings analyzed, 1; equaled guaranty.
- Middlesboro Milling Co., Middlesboro, Ky. Inspection samples analyzed, 8.
"Hard-to-Beat" Feed, 2; 1 no salt or calcium carbonate found.
"Hi-Grade Brand" Feed, 2; 1 no calcium carbonate found.
"Good Value Brand" 16% Protein Dairy Feed, 2; equaled guaranty.
"Reliable Brand" 24% Protein Dairy Feed, 2; no linseed oil meal found; 1 deficient in fat.
- Model Mill Co., McKenzie, Tenn. Inspection sample of Model Mill Special Horse and Mule Feed analyzed, 1; deficient in protein and much excess fiber; ingredients not as guaranteed; adulterated and misbranded.
- Monarch Milling Co., Mt. Sterling, Ky. Inspection sample of Mixed Feed analyzed, 1; deficient in protein.
- Monroe Milling Co., Waterloo, Ill. Inspection sample of Waterloo 16% Protein Dairy Feed analyzed, 1; no corn gluten meal or oat hull feed found; only trace of alfalfa meal present.
- Moorman Manufacturing Co., Quincy, Ill. Inspection samples analyzed, 10.
Moorman's Poultry Mineral No. 1, 1; equaled guaranty.
Moorman's Poultry Concentrate (Supplement), 1; equaled guaranty.
Moorman's Hog Mineral, 1; equaled guaranty.
Moorman's Block Minerals No. 1 (For Grazing Sheep), 5; equaled guaranty.
Moorman's Grostrong Brand Block Minerals No. 1 (Summer Formula for Horses and Mules), 2; 1 excess salt.
- Mountain City Mill Co., Chattanooga, Tenn. Inspection samples of Blue Stock Feed analyzed, 3; equaled guaranty.
- Mt. Vernon Milling Co., Mt. Vernon, Ind. Inspection samples of "Poco" Hominy Feed analyzed, 2; equaled guaranty.
- Mouton Rice Milling Co., Harrisburg, Ark. Inspection sample of Rice Bran analyzed, 1; equaled guaranty.
- Munfordville Milling Co., Munfordville, Ky. Inspection samples analyzed, 6.
Corn Meal, 1; equaled guaranty.
Corn By-product Feed, 3; equaled guaranty.
Mixed Feed, 2; equaled guaranty.

Nashville Cotton Oil Mill, Nashville, Tenn. Inspection samples analyzed, 5.

41% Protein Cottonseed Meal, 4; 3 deficient in protein; 2 excess fiber.

43% Protein Soybean Oil Meal, 1; equaled guaranty.

National Milling Branch of National Biscuit Co., Toledo, O. Inspection samples analyzed, 2.

Tolio Wheat Flour Middlings and Screenings, 1; excess fiber.

Namico Wheat Gray Middlings and Screenings, 1; equaled guaranty.

National Oats Co., E. St. Louis, Ill. Inspection samples analyzed, 13.

Corno Growing Mash, 1; equaled guaranty.

Corno All-Mash Ration-Starting and Growing, 1; equaled guaranty.

Corno 18% Protein Laying Mash (With Cod Liver Oil), 1; equaled guaranty.

Corno 20% Protein, Laying Mash, 1; no dried buttermilk found.

Corno Hog Fattener, 2; equaled guaranty.

Corno 40% Protein Hog Supplement, 1; equaled guaranty.

Corno Bulky Premium Feed, 1; equaled guaranty.

Nutro 16% Protein Dairy Feed, 2; equaled guaranty.

Corno 24% Protein Dairy Feed, 3; equaled guaranty.

Neuhoff Packing Co., Nashville, Tenn. Inspection sample of Neuhoff's 60% Protein Digester Tankage analyzed, 1; much deficient in protein; misbranded.

New Era Mills, Allensville, Ky. Inspection samples of Mixed Feed analyzed, 2; 1 deficient in protein and fat, wheat flour present.

New Richmond Roller Mills Co., New Richmond, Wis. Inspection samples analyzed, 2.

Pulverized Oats, 1; deficient in fat.

Pulverized Barley, 1; excess fiber; excess barley hulls present.

Nicholson Mills, Henderson, Ky. Inspection samples analyzed, 2.

"Numix" Special All-Mash, 1; excess fiber.

"Numix" 24% Protein Sweet Dairy Feed, 1; equaled guaranty.

Nolin Milling Co., Nolin, Ky. Inspection sample of Royal Mixed Feed analyzed, 1; deficient in fat; wheat screenings present tho not guaranteed.

Northern Illinois Cereal Co., Lockport, Ill. Inspection sample of Gold Medal Fine Ground Feeding Oatmeal, 1; equaled guaranty.

Chas. Nunn & Sons Milling Co., Evansville, Ind. Inspection samples analyzed, 5.

Wheat Gray Shorts and Screenings, 1; deficient in protein; corn products present.

"Nunn-Better Brand" All-Mash (With Cod Liver Oil), 1; equaled guaranty.

- "Nunn-Better Brand" Egg Mash, 2; ground soybeans substituted for soybean oil meal.
- "Sweet Sixteen" Dairy Ration No. 2, 1; equaled guaranty.
- Owensboro Milling Co., Owensboro, Ky. Inspection samples analyzed, 14.
- "Tru-Test Brand" Hominy Feed, 1; equaled guaranty.
- "Tru-Test Brand" Wheat Feed, 1; equaled guaranty.
- "Tru-Test Brand" Laying Mash, 3; equaled guaranty.
- O-Mil-Co Laying Mash, 1; equaled guaranty.
- D and H Stock Feed, 3; 1 deficient in fat; 1 excess fiber.
- Star 16½% Protein Dairy Feed, 4; 3 deficient in protein.
- "Tru-Test Brand" 24% Protein Dairy Feed, 1; equaled guaranty.
- Paramount Feed Mills (Ferncliff Feed & Grain Co.), Louisville, Ky. Inspection sample of Paramount 24% Protein Dairy Feed analyzed, 1; equaled guaranty.
- I. E. Payne, Eubank, Ky. Inspection sample of Farmer's Choice Feed analyzed, 1; deficient in protein; wheat flour present.
- Pembroke Roller Mills, Pembroke, Ky. Inspection samples of Mixed Feed analyzed, 4; 1 deficient in protein, wheat flour present.
- Penick & Ford, Ltd., Cedar Rapids, Ia. Inspection sample of Douglas Corn Gluten Feed analyzed, 1; equaled guaranty.
- Phoenix Flour Mills, Evansville, Ind. Inspection sample of Wheat Shorts and Screenings analyzed, 1; equaled guaranty.
- Phoenix Milling Co., Providence, Ky. Inspection samples of Mixed Feed analyzed, 2; 1 deficient in protein, wheat flour present.
- Pleasantville Mill Co., Pleasantville, O. Inspection sample of Home Wheat Gray Middlings and Screenings analyzed, 1; much deficient in protein and fat; wheat flour present.
- R. C. Poage Milling Co., Ashland, Ky. Inspection samples analyzed, 10.
- Pomco Complete Growing Mash, 1; equaled guaranty.
- Pomco All-Mash Starter and Grower (With Cod Liver Oil), 1; equaled guaranty.
- Pomco 20% Protein Laying Mash (With Cod Liver Oil), 1; deficient in protein.
- Pomco Hog and Pig Feed, 1; soybean oil meal and calcium carbonate present tho not guaranteed; no charcoal found.
- "Ideal Brand" Stock Feed, 2; deficient in protein.
- Vim 16% Protein Dairy Feed, 1; equaled guaranty.
- Pomco 16% Protein Dairy Feed, 1; equaled guaranty.
- Vim 24% Protein Dairy Feed, 1; equaled guaranty.
- Pomco 24% Protein Dairy Feed, 1; equaled guaranty.
- Poole Milling Co., Poole, Ky. Inspection samples of Mixed Feed analyzed, 3; deficient in protein; wheat flour present.

- Ph. H. Postel Milling Co., Mascoutah, Ill. Inspection sample of "Elegant" Wheat Gray Shorts and Screenings analyzed, 1; equaled guaranty.
- Pratt Food Co., Hammond, Ind. Inspection samples analyzed, 8.
Utility Brand All-Mash Starter and Grower, 2; equaled guaranty.
Pratt's Cak-Cak Egg Mash, 1; deficient in protein.
Pratt's Laying Mash, 1; deficient in fat.
Pratt's Pigeon Feed (With Corn), 1; no hemp seed found; buckwheat present tho not guaranteed
Pratt's Rabbit Feed, 1; equaled guaranty.
Pratt's Calf Meal, 1; equaled guaranty.
Utility Brand Sweet 24% Protein Dairy Feed, 1; equaled guaranty.
- Purcell Seed Co., Evansville, Ind. Inspection samples analyzed, 4.
"New Idea" All-Mash Poultry Ration, 2; equaled guaranty.
"New Idea" All-Mash Poultry Ration (With Cod Liver Oil), 1; equaled guaranty.
"New Idea" Egg Mash, 1; no soybean oil meal found.
- Purity Oats Co., Keokuk, Ia. Inspection sample of Chief Feeding Oatmeal analyzed, 1; equaled guaranty.
- The Quaker Oats Co., Chicago, Ill. Inspection samples analyzed, 8.
Aunt Jemima Wheat Gray Shorts and Screenings, 1; equaled guaranty.
Yellow Hominy Feed, 1; not registered; below standard in fat.
"Ful-O-Pep" Chick Starter, 1; equaled guaranty.
"Ful-O-Pep" Broiler Mash, 1; equaled guaranty.
"Ful-O-Pep" Egg-Breeder Mash, 2; equaled guaranty.
Quaker Schumacher Sweet Feed, 2; equaled guaranty.
- C. B. Ragland Co., Nashville, Tenn. Inspection sample of Old Time Scratch Feed analyzed, 1; only trace of ground oats present.
- Ralston Purina Co., St. Louis, Mo. Inspection samples analyzed, 42.
41% Protein Soybean Oil Meal, 1; equaled guaranty.
Purina Chick Startena, 1; only traces of corn germ meal and wheat germ present.
Purina Broiler Chow, 2; equaled guaranty.
Purina Chick Growena (All-Mash), 2; equaled guaranty.
Purina Chicken Fatena, 1; equaled guaranty.
Purina Lay Chow, 1; equaled guaranty.
Purina Layena (Complete Ration), 2; equaled guaranty.
Purina Family Flock Chow, 2; equaled guaranty.
Purina Turkey Startena, 1; excess fiber.
Purina Turkey Growena, 2; 1 ground oat product present tho not guaranteed.
Purina Turkey Breeder Chow, 1; equaled guaranty.
Purina Rabbit Chow, 2; equaled guaranty.
Purina Fox Chow, 1; equaled guaranty.

- Purina Omolene, 2; 1 no soybean oil meal found.
Purina Bulky Omolene, 1; equaled guaranty.
Purina Steer Fatena, 3; 2 ground corn present tho not guaranteed.
Purina Hog Fatena, 1; no molasses or linseed oil meal found;
soybean oil meal present tho not guaranteed.
Purina Pig and Hog Chow (Supplement), 2; equaled guaranty.
Purina Dry and Freshening Chow, 2; equaled guaranty.
Purina Cow Chow 16% Protein, 2; equaled guaranty.
"Protana Brand" 16% Protein Dairy Feed (Southern States), 2;
equaled guaranty.
Purina Milking Cow Chow 20% Protein, 1; equaled guaranty.
Purina Milking Cow Chow 24% Protein, 1; equaled guaranty.
Purina Cow Chow 24% Protein, 2; 1 deficient in protein.
Protana 24% Protein Dairy Feed, 2; equaled guaranty.
Purina Cow Chow 34% Protein Supplement, 1; equaled guaranty.
Purina Milking Cow Chow 34% Protein Supplement, 1; equaled
guaranty.
Randolph Milling Co., Bandana, Ky. Inspection sample of Mixed Feed
analyzed, 1; equaled guaranty.
Read Phosphate Co., New Albany, Ind. Inspection samples analyzed, 5.
Read's Red Diamond 50% Protein Meat and Bone Scraps, 3;
1 much deficient in protein; 1 deficient in protein.
Read's Red Diamond 60% Protein Digester Tankage, 2; equaled
guaranty.
Red River Mills, Adairville, Ky. Inspection sample of Shipstuff ana-
lyzed, 1; equaled guaranty.
Riverdale Products Co., Chicago, Ill. Inspection samples analyzed, 4.
Chapman's Red Top 50% Protein Meat and Bone Meal, 2; equaled
guaranty.
Chapman's Red Top 60% Protein Digester Tankage, 2; deficient
in protein.
Roberts Cotton Oil Mill, Cairo, Ill. Inspection sample of "Missouri
Maid" 41% Protein Cottonseed Meal analyzed, 1; equaled
guaranty.
Rocky Hill Milling Co., Rocky Hill, Ky. Inspection samples of Mixed
Feed analyzed, 2; 1 deficient in protein, wheat flour present.
P. M. Rountree, Benton, Ky. Inspection sample of Wheat Bran, Shorts
and Screenings analyzed, 1; deficient in protein and fat; wheat
flour present.
Rudy-Patrick Seed Co., Kansas City, Mo. Inspection sample of Pul-
verized Whole Oats analyzed, 1; deficient in protein and excess
fiber.
Rush County Mills, Rushville, Ind. Inspection samples analyzed, 2.
Hominy Feed, 1; equaled guaranty.

- "RCM" 16% Protein Dairy Feed, 1; much deficient in protein; deficient in fat; excess cottonseed hulls present; corn bran present tho not guaranteed; misbranded.
- Russell Milling & Coal Co., Morristown, Tenn. Inspection samples of Rusco Feed analyzed, 2; deficient in protein; 1 corn meal present tho not guaranteed; 1 excess fiber, salt present tho not guaranteed.
- Salt Lick Roller Mills, Salt Lick, Ky. Inspection samples analyzed, 3.
- Perfect Brand Wheat Mixed Feed, 1; deficient in protein and fat; wheat flour present.
- Perfect Brand X Mixed Feed, 2; 1 deficient in protein.
- Sandusky Bros., Harrodsburg, Ky. Inspection samples of Mixed Feed analyzed, 2; deficient in protein; wheat flour present; 1 no corn bran found.
- Saunders Mills, Inc., Toledo, O. Inspection samples of Alfalfa Meal analyzed, 2; 1 excess fiber.
- Schenley Products Co., Inc., New York, N. Y. Inspection sample of Distillers Corn Dried Grains analyzed, 1; equaled guaranty.
- Schultz, Baujan & Co., Beardstown, Ill. Inspection samples analyzed, 7.
- Hard Wheat Red Dog, 2; equaled guaranty.
- Sunbeam Wheat Gray Middlings and Screenings, 1; equaled guaranty.
- Critic Poultry Fattening Feed, 1; equaled guaranty.
- "Sweet Clover Brand" 16% Protein Dairy Feed, 3; 1 deficient in protein and fat.
- Scioto Farm Bureau Cooperative Association, Lucasville, O. Inspection sample of Scioto Feed analyzed, 1; equaled guaranty.
- Joseph E. Seagram & Son, Louisville, Ky. Inspection sample of Seagram's Distillers Corn Dried Grains analyzed, 1; equaled guaranty.
- Sebree Milling Co., Sebree, Ky. Inspection sample of Korb's Heavy Mixed Feed analyzed, 1; deficient in protein; wheat flour present.
- Shaver & Elkins, Greenville, Ky. Inspection sample of R. B. Wheat Mixed Feed analyzed, 1; deficient in protein and fat.
- Shellabarger Grain Products Co., Decatur, Ill. Inspection sample of Shellabarger's Cooked 41% Protein Soybean Oil Meal analyzed, 1; equaled guaranty.
- Sherwin-Williams Co., Cleveland, O. Inspection sample of Sherwin-Williams Old Process 34% Protein Linseed Oil Meal analyzed, 1; equaled guaranty.
- Simpson County Mills, Franklin, Ky. Inspection samples of Mixed Feed analyzed, 2; equaled guaranty.
- Slaughters Milling Co., Slaughters, Ky. Inspection sample of Mixed Feed analyzed, 1; deficient in protein and fat; wheat flour present.
- The W. J. Small Co., Neodesha, Kans. Inspection sample of Keystone Alfalfa Leaf Meal analyzed, 1; equaled guaranty.

- J. Allen Smith & Co., Knoxville, Tenn. Inspection sample of "Butter Fat Brand" Feed analyzed, 1; equaled guaranty.
- Smithfield Milling Co., Smithfield, Ky. Inspection samples of Mixed Feed analyzed, 3; deficient in protein.
- Smiths Grove Milling Co., Smiths Grove, Ky. Inspection sample of Mixed Feed analyzed, 1; deficient in protein; wheat flour present.
- The Southern Cotton Oil Co., Atlanta, Ga. Inspection sample of 41% Protein Cottonseed Meal analyzed, 1; equaled guaranty.
- The Southern Cotton Oil Co., Decatur, Ala. Inspection sample of "High Grade" 41% Protein Cottonseed Meal analyzed, 1; deficient in protein and excess fiber.
- A. E. Staley Manufacturing Co., Decatur, Ill. Inspection samples analyzed, 4.
- Staley's 41% Protein Soybean Oil Meal, 3; equaled guaranty.
- Staley's Corn Oil Meal, 1; equaled guaranty.
- Staley Milling Co., Kansas City, Mo. Inspection sample of "Record" Egg Mash (With Cod Liver Oil), 1; equaled guaranty.
- Standard Milling Co., Elkton, Ky. Inspection sample of Mixed Feed analyzed, 1; deficient in protein; wheat flour present.
- Star Milling Co., Clinton, Ky. Inspection samples analyzed, 5.
- Wheat Gray Shorts, 1; deficient in protein and fat and excess fiber; corn product present; misbranded.
- "Star Brand" Laying Mash, 1; equaled guaranty.
- "Star Brand" 16% Protein Dairy Feed, 3; deficient in protein—misbranded; 2 excess oat hull feed present; 1 excess screenings present, lespedeza meal present tho not guaranteed.
- Star Roller Mills, Cloverport, Ky. Inspection sample of Star Laying Mash analyzed, 1; no soybean oil meal or meat scraps found; cotton seed meal present tho not guaranteed.
- Sunnyside Milling Co., Evansville, Ind. Inspection sample of Winter Wheat Mixed Feed and Screenings analyzed, 1; equaled guaranty.
- The Superior Feed Co. (Royal-Stafolife Mills), Memphis, Tenn. Inspection sample of "Laymo Brand" Egg Mash analyzed, 1; equaled guaranty.
- D. B. Sutherland & Sons, Bloomfield, Ky. Inspection sample of Sutherland's Mixed Feed analyzed, 1; deficient in protein; no corn bran found.
- Swift & Co., Chicago, Ill. Inspection samples analyzed, 9.
- Swift's Dried Buttermilk, 2; equaled guaranty.
- Swift's 5% Protein Special Steamed Bone Meal, 2; 1 excess fiber.
- Swift's 50% Protein Meat and Bone Scraps, 1; equaled guaranty.
- Swift's 60% Protein Digester Tankage, 4; 1 deficient in protein.
- Swift & Co., Cairo, Ill. Inspection sample of "Cotton Bloom" 41% Protein Cottonseed Meal analyzed, 1; equaled guaranty.

- Swift & Co. Oil Mill, Memphis, Tenn. Inspection sample of "Cotton Bloom" 41% Protein Cottonseed Meal analyzed, 1; equaled guaranty.
- Swift & Co. Soybean Mill, Champaign, Ill. Inspection samples of Swift's 41% Protein Soybean Oil Meal analyzed, 3; equaled guaranty.
- J. H. Tate & Co., Monticello, Ky. Inspection sample of J. H. Tate & Co.'s Feed analyzed, 1; deficient in protein and fat; ground wheat present, no corn bran found.
- Tell City Flouring Mills, Tell City, Ind. Inspection samples analyzed, 2.
- Hoosier Special Wheat Brown Shorts and Screenings, 1; deficient in protein and fat; wheat flour present; no calcium carbonate found.
- Hoosier Poultry Scratch Feed, 1; equaled guaranty.
- Thomson's Mill, Madisonville, Ky. Inspection samples analyzed, 6.
- "Thomson's Best" Wheat Mixed Feed, 1; deficient in protein and fat; wheat flour present.
- Thomson's Special Mixed Feed, 1; much deficient in protein.
- "Just-Rite Brand" Egg Mash, 1; much deficient in protein.
- "Ideal Brand" Egg Mash, 1; equaled guaranty.
- "Thomson's Ideal Brand" 16% Protein Dairy Feed, 2; deficient in fat; 1 no brewers' dried grains found, soybean oil meal present tho not guaranteed.
- Trenton Cotton Oil Co., Trenton, Tenn. Inspection samples of "Trenton Brand" 41% Protein Cottonseed Meal analyzed, 3; 2 deficient in protein and excess fiber.
- Triple-Bridge Mills, Franklin, Ky. Inspection samples analyzed, 2.
- Wheat Bran, 1; equaled guaranty.
- Wheat Gray Shorts, 1; much deficient in protein and fat; wheat flour present.
- The Ubiko Milling Co., Cincinnati, O. Inspection samples analyzed, 17.
- Ubiko All-Mash Starter, 1; equaled guaranty.
- Ubiko All-Mash Broiler Ration, 1; equaled guaranty.
- Ubiko All-Mash Developer, 2; equaled guaranty.
- Ubiko Mash Balancer, 1; equaled guaranty.
- Sunbeam Laying Mash, 1; equaled guaranty.
- Ubiko Turkey Starter and Grower, 1; equaled guaranty.
- Honeycomb Sweet Feed, 2; 1 cottonseed meal and soybean oil meal present tho not guaranteed.
- Ubiko Rabbit Pellets, 1; equaled guaranty.
- Ubiko Pig and Sow Ration, 1; excess fiber.
- Clover Bloom Sweet 16% Protein Feed, 2; equaled guaranty.
- 24% Protein Sunbeam Dairy Ration, 1; only trace of malt sprouts present.

24% Protein Sweet Union Grains Dairy Ration, 2; equaled guaranty.

32% Protein Sweet Union Grains Dairy Ration (Supplement), 1; equaled guaranty.

The Union National Mill, Springfield, O. Inspection sample of William Tell Wheat Brown Middlings and Screenings analyzed, 1; equaled guaranty.

Union Starch & Refining Co., Columbus, Ind. Inspection sample of Union Corn Gluten Meal analyzed, 1; equaled guaranty.

United Supply Co., Lynch, Ky. Inspection sample of Usco 16% Protein Dairy Ration analyzed, 1; equaled guaranty.

Van Meter-Terrell Feed Co., Lexington, Ky. Inspection sample of Viola 20% Protein Cow Feed analyzed, 1; brewers' dried grains substituted for distillers' dried grains.

Vevay Flour Mills, Vevay, Ind. Inspection sample of Wheat Bran ing and Growing Mash analyzed, 1; deficient in protein and fat; wheat screenings present; misbranded.

Wabash Elevator Co., Inc., Uniontown, Ky. Inspection samples analyzed, 2.

Wheat Gray Shorts, 1; equaled guaranty.

Wheat Mixed Feed, 1; equaled guaranty.

Walton Feed Mills, Walton, Ky. Inspection sample of Big Bone Starting and Growing Mash analyzed. 1; deficient in protein and fat; excess fiber.

Washburn Crosby Co., Louisville, Ky. Inspection samples of "Sonny South" Wheat Brown Shorts and Screenings analyzed, 2; equaled guaranty.

Weisenberger Sanitary Flour Mills, Midway, Ky. Inspection samples analyzed, 7.

"Repeater" Feed, 2; 1 deficient in protein.

"Live and Gro" Starting and Growing Mash, 2; soybean oil meal present tho not guaranteed; 1 no dried buttermilk found.

"Repeater" 16% Protein Dairy Feed, 1; no ground barley found; only trace of alfalfa meal present.

"Repeater" 24% Protein Dairy Feed, 2; deficient in protein; 1 excess fiber; 1 brewers dried grains substituted for distillers dried grains, only trace of alfalfa meal present.

Western Alfalfa Meal Co., Belleville, Ill. Inspection sample of Alfalfa Leaf Meal analyzed, 1; excess fiber.

West Louisville Mills Co., W. Louisville, Ky. Inspection sample of C and W Mixed Feed analyzed, 1; equaled guaranty.

The White Milling Co., Dale, Ind. Inspection samples of Mixed Feed analyzed, 2; 1 no corn bran found.

- Wiedlocher & Sons, Springfield, Ill. Inspection samples analyzed, 6.
 "Faultless Brand" Baby Chick Starting Mash (With Cod Liver Oil), 1; equaled guaranty.
 "Faultless Brand" Growing Mash, 1; equaled guaranty.
 "Faultless Brand" Egg Mash, 1; no linseed oil meal found.
 "Faultless Brand" Calf Meal, 1; equaled guaranty.
 Congress 16% Protein Dairy Feed, 1; equaled guaranty.
 "Faultless Brand" 24% Protein Dairy Ration, 1; equaled guaranty.
- Williamstown Roller Mills, Williamstown, Ky. Inspection samples analyzed, 2.
 Screened Cracked Corn, 1; equaled guaranty.
 Mixed Feed, 1; equaled guaranty.
- Winchester Roller Mills, Winchester, Ky. Inspection sample of Perfection Brand Mixed Feed analyzed, 1; equaled guaranty.
- Woolcott Milling Co., Harrisburg, Ill. Inspection sample of Mixed Feed analyzed, 1; equaled guaranty.
- Yopp Seed Co., Paducah, Ky. Inspection sample of "Manamar Brand" All-Mash analyzed, 1; deficient in fat.
- J. W. Zaring Grain & Mill Co., Richmond, Ky. Inspection sample of Bonanza Feed analyzed, 1; deficient in protein; wheat flour present.
- Ziliak & Schafer Milling Co., Evansville, Ind. Inspection samples analyzed, 7.
 Wheat Shorts and Screenings, 1; deficient in protein and fat; wheat flour and ground corn present.
 Target Egg Mash, 2; 1 no charcoal found.
 Elite Egg Mash, 1; deficient in protein; alfalfa meal and soybean oil meal present tho not guaranteed.
 Elite Horse and Mule Feed, 1; equaled guaranty.
 Lamey's Special 16% Protein Dairy Feed, 2; 1 deficient in fat.