

Proposed Changes in Inter-State Rules, G. WORTHEN AGEE**Chapter X—Sampling Article 2—Method of Sampling****RULE 240—COTTONSEED**

Section 1. On arrival of car at mill seed shall be first sampled as provided hereafter in Section 2, and if found off quality shipper shall be notified before unloading but allowance for excess moisture, foreign matter and damaged and immature seed shall be based on test of sample drawn when car is being unloaded, as provided hereafter in Section 3.

Section 2. In Cars before Unloading.—When necessary to sample cars of cottonseed before they are unloaded samples shall be taken in both ends and middle of car at eight or ten different points, not less than fifty pounds in all. As representative samples as possible shall be obtained by digging well down into the body of the seed, preferably not less than thirty (30) inches with a short handled, eight tine fork. The large sample may be reduced in size, if necessary, by carefully quartering and mixing, taking precautions to prevent separating the bolls, trash and sand from the seed.

Section 3. In Cars when Unloading.—Seed can best be sampled at this time. A sack shall be placed in the car and representative portions of the seed placed in it from time to time at such intervals as shall allow of not less than fifty pounds being obtained by the time the car is emptied. This large sample shall be mixed and divided into two twenty-five pound samples, one of which shall be saved for arbitration purposes if so needed.

Section 4. Wagon Seed.—Representative samples shall be taken from a number of points in the wagon, not less than five pounds in all and well down in body of seed. Allowance for off quality shall be based on this sample.

Section 5. Laboratory Samples.—Samples to be sent to a laboratory for analysis of grading shall be about one (1) pound in weight and shall be enclosed in an air-tight container such as a mason jar or friction top metal can to prevent loss of moisture. To insure representative laboratory sample the large sample shall be quartered down as described in the Note appended to the Rule.

For grading, one hundred (100) seeds shall be taken at random from the well mixed sample and shall be cut in two, lengthwise. All seed the kernels of which are darker than the natural color shall be classed as damaged seed; the percentage of damage shall be determined by counting the damaged and immature seed. Determination of moisture shall be made in accordance with the official methods of this Association.

NOTE: The process of quartering a sample to proper size is so important that a detailed description follows:

Mix the large sample carefully and heap it up into a cone shaped pile. Flatten this out into a round flat pile and divide into four equal parts by drawing two lines through the center at right angles to one another. Discard two of the diagonally op-

posite quarters, remix the remaining two and again heap, flatten out, divide and discard two of the quarters. Continue this process until the sample is reduced to a desired size. Care must be observed to see that sand, bolls and other foreign matter are thoroughly incorporated into the seed in mixing.

RULE 246—HULLS

Section 1. Hulls Loaded in Car.—Draw representative samples from eight or ten different points in ends and middle of car, getting them from well down in body of the hulls. The samples so obtained shall be ten pounds or more in weight and shall be reduced to a suitable size by repeated mixing and quartering.

Sampling of Oriental Oil Cakes, Etc., H. P. BANKS

The results obtained by the Analyst are worthless if the samples are not truly representative of the material under examination. This statement is axiomatic but it is a cause of continued wonder that so few realize the importance of correct sampling. Preparation of the sample after same is taken is equally important but knowing the origin of the sample brought to the laboratory assists materially. The chemist's section of the *Cotton Oil Press* has contained articles on the preparation of samples of copra, etc., which are valuable.

Our experience with oriental commodities, peculiar to the Pacific Coast, has caused us to establish certain methods for sampling which are generally outlined as follows: though experience and common sense knowledge of the sample is the most important part of the method.

Soya Bean and Linseed Cake

The method of sampling Soya Bean Cake depends upon whether it is "Cartwheel" or "English" style. Cartwheel Cake is sampled by boring the cakes with a 1" bit. Cakes are selected to represent the pile (as by the Templet Method) and each cake is bored several times, beginning at the center and working toward the outer edge. Due to the variance in moisture content in this type of cake, it is essential that this procedure be followed so that representative sample may be obtained. This type of cake is also subject to mold, and if the shipment should be generally moldy, samples should be taken so that this condition may be noted when samples are brought to the laboratory for analysis and further examination. It is also essential that the sampler examine the shipment for presence of vermin which might seriously affect the merchantability of the shipment.

"English" Style Soya Bean Cake, packed in bags, may be sampled in accordance with Rule 244 of the Interstate Cottonseed Crushers Association.

"Linseed Cake," being in the same form as "English" Style Soya Bean Cake, is sampled in the same manner. However, in sampling Oriental