

materials for industrial products, and means for fractionating the oils and their acids to obtain technically pure materials are now being made available. In view of these developments, it will be of interest, and of considerable value to the oil trade, to procure information on the compositions of the oils in the several other types of weed seeds available as waste products of the grain-processing industries.

LITERATURE CITED

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Report of the Cellulose Yield Committee

DURING the past year linter samples were sent out seven times by the committee to 13 laboratories. Each set consisted of three samples, A and B of lint and C of hull fiber. Nine laboratories completed all seven sets sent out; four laboratories completed five sets. A different type of lint or hull fiber was sent out each time; however, sample A always represented a good grade of second cut linters and B a poorer grade in regard to yield. Sample C, which was the hull fiber sample, was an average hull fiber grade.

The results were averaged by laboratories and are presented in the table below. Only the results of the laboratories which completed all seven sets were included in the overall average.

Lab. No.	Number sets of samples tested	Samples			Overall average year
		A Linters	B Linters	C Fiber	
1.....	7	77.3	72.9	69.6	73.3
2.....	7	77.9	73.2	70.1	73.7
3.....	7	77.8	73.4	70.5	73.9
4.....	5(1)	77.9	73.9	71.6
5.....	7	78.1	73.5	70.8	74.1
6.....	7	78.3	73.4	70.7	74.1
7.....	7	77.6	73.0	70.2	73.6
8.....	5(1)	78.1	74.1	70.8
9.....	7	79.0	74.4	71.2	74.9
10.....	5(1)	77.5	74.0	70.9
11.....	7	78.4	74.1	71.1	74.5
12.....	7	78.6	73.8	70.8	74.4
13.....	5(1)	78.7	74.1	70.7
Avg. (seven sets only).....		78.1	73.5	70.6	74.1

(1) Five sets run, not included in average.

In the case of Laboratory No. 9, the results reported in one case were high. The reason for this was found and corrected. These analyses were included in the average above.

It was found during the past year as in previous years that it is very essential to watch the water pressure at which the samples are washed. Several cases of poor results have been due to this cause during the past year.

As no method of car sampling of linters and hull fiber has been adopted, the following procedure has been worked out and is recommended for adoption.

Car Sampling of Linters and Hull Fiber

LINTER samples should be taken in the dry. That is, if it is raining, take sample inside of car unless unloading under a shed which prevents the bales from getting wet.

One handful, 25 grams \pm 5 grams, of linters is taken from each bale as it is unloaded. It should be taken at different positions on bales to insure a representative sample. The sample is taken as follows: Cut the bagging to remove the sample from underneath if necessary. Run the hand underneath the first layer of linters as far as possible, whenever possible, and obtain a handful. Where the bale is too tightly compressed to do this, pull off a small piece of the bale and throw away the outside portion.

The linters are put in as near an air-tight container as possible, 5 gallons \pm 1 gallon, with a close fitting air-tight cover. A five-gallon G. I. can or other close fitting lid cans should be used. The container should be closed after each handful is put in, keeping the linters pressed down.

The container should be closed as near air-tight as possible when sent to the laboratory for analyses. By taking approximately 25 grams per handful, the car sample should weigh from 4 to 6 pounds.

If the sample of linters is to be sent some distance for analysis, a separate sample, of approximately 100 grams \pm 10 grams, in a small air-tight quart size container, should be included for actual moisture determination. By some distance it is meant to another city where the sample has to be shipped by express or parcel post.

Note: It is thought advisable to include the extra sample for moisture if the sample is to undergo high temperature during shipment, as it is hard to obtain a large container which is air-tight under wide temperature changes. The moisture from the small sample is to be used for calculating the yield to the moisture as unloaded.

Recommendations

(1) That samples be sent out to laboratories for yield checks at least once every two months.

(2) That the car sampling procedure be adopted as a standard procedure for sampling linters and hull fiber.

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