

perature inside the cottonseed was measured during the dielectric heat treatment. Temperatures above 100°C. were attained in less than one minute.

Acknowledgment

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Report of the Referee Board

FOR the year 1947-8 28 referee certificates were issued, including 26 renewals. The full list has been published in the *Journal of the American Oil Chemists' Society* except for the name of Dan L. Henry of Law and Company in Atlanta. There are also pending four new applications for appointment as referee chemist.

The only thing unusual in the experience of the Referee Board during the past year has been a large number of inquiries regarding new referee certificates and the fact that most of these are not resulting in actual filing of an application. Official analysis and grading of oil bearing seeds and derived products has become a very complicated subject. We have federal government supervision of seed grading, with a system for cottonseed which evolved from a system concerned with grading the cotton fiber, and with another system for soybeans which is in course of evolving from the grading system on grains. Then we have separate trade associations which appoint official chemists, each having its own routine for making appointments. Both the N.C.P.A. and the N.S.P.A. require official chemists to be referee chemists of our Society. Imagine the state of mind of a young chemist who first is urged by a soybean crusher to become an official chemist on soybean products, then writes to N.S.P.A. headquarters, is then referred to the chairman of the N.S.P.A. Technical Committee, is next referred to the chairman of the Referee Board of the A.O.C.S. (of which the young chemist may or may not be a member), and still faces the problem of dealing with the Department of Agriculture on beans even if he masters the intricacies of the A.O.C.S. and N.S.P.A. literature concerned with official analysis and grading of the oil and of meal.

The Referee Board is in a better position to observe than to correct this complicated situation. At present, we merely call it to the Society's attention.

G. W. AGEE	R. T. MILNER
J. P. HARRIS	A. S. RICHARDSON,
R. R. KING	chairman

Report of the Cellulose Yield Committee, 1947-48

DURING the past year four sets of linter samples of three grades were sent out to 11 laboratories. One laboratory, number 4, reported only two sets of results so these results are omitted from the report. The average yield results for the three types of linters sent out are given below:

Lab. No.	No. Sets Samples Tested	Samples			Overall Average for Year
		A Linters	B Linters	C Fiber	
1.....	4	77.2	72.6	72.2	74.0
2.....	4	77.0	72.7	72.7	74.1
3.....	4	76.3	72.2	71.8	73.4
5.....	4	76.1	73.1	71.5	73.2
6.....	4	76.9	72.6	72.1	73.9
7.....	4	76.9	72.5	71.7	73.7
8.....	4	77.3	72.4	73.1	74.3
9.....	4	76.9	71.8	71.1	73.3
10.....	4	77.4	72.7	71.9	74.0
11.....	4	77.2	72.9	72.7	74.3
Average.....	76.9	72.5	72.1	73.8

As seen from the above table, the average results show very good agreement between laboratories.

Recommendations

It is recommended that samples be sent out to all laboratories which request the samples during the next year at least four times, as it has been shown that a frequent checking of the method and equipment is necessary for consistent agreement of results between laboratories.

E. C. AINSLIE	W. S. HUDE
M. G. BOULWARE	E. H. TENENT
C. H. COX	L. N. ROGERS,
	chairman

Report of the Gossypol Analysis Committee, 1947-48

WHEN solvent extraction plants first began to process cottonseed in 1947, there was an urgent need for a quantitative analytical method for gossypol which would give concordant results when used by laboratory technicians and would require a minimum of time and cost. To meet these requirements this committee chose for study the established spectrophotometric method of F. H. Smith, *Industrial and Engineering Chemistry*, analytical edition, vol. 18, 43-45 (1946) and the modification, unpublished, proposed by W. T. Coleman. The latter uses a single mixture of isopropanol and water in place of the several ethanol mixtures required by the Smith method and is therefore simpler, quicker, and less expensive.

As a variety of photoelectric instruments were being used by the several committee members, it was considered advisable to have data on the instruments in use and the readings as found, as well as the translation of readings to per cent gossypol. An isopropanol extract of cottonseed meal and an aniline developed solution of the same were sent out to each committee member to be read on the same day. Re-