Report of Smalley Foundation Committee 1942-1943

We are presenting herewith the 25th report of the Smalley Foundation Committee of the American Oil Chemists' Society. During these past twenty-five years considerable progress has been made in the accuracy of the determination of Oil and Nitrogen on cottonseed meal. The results obtained in practically all determinations were slightly higher than last year. It must be understood, in gauging the accuracy of the results a difference of two points in either direction from the average is permitted without a deduction from the grade.

Fewer laboratories than in years gone by reported on all thirty samples. This is, no doubt, due to press of work and lack of help and we feel that these laboratories should be commended for their good work.

In spite of this, as stated above, the results obtained were slightly higher than formerly. The Barrow-Agee Laboratories of Memphis, Tenn., had a perfect record on the determination of nitrogen, their grade being 100%. As far as we can recall, this is the first time such a result was obtained on the nitrogen determination, although on one previous occasion the winner in the oil series also had a perfect record.

As usual, thirty samples of cottonseed meal were distributed to the collaborators.

There are attached to this report four tables indicating the standing in percentage of the members taking part. Table No. I gives the standing of 35 collaborators who reported oil determinations on all samples. Table No. II gives the standing of 42 collaborators who reported nitrogen results on all samples. Table No. III gives the standing of 35 collaborators who reported oil and nitrogen on all samples. In these tables we have taken into consideration the results of those reports which were received within the time specified in our original announcement of the Smalley Foundation work. In Table No. IV we have given the standing of those collaborators who reported on all samples, but some of whose reports were received too late to be included under the rules.

The winning collaborators are as follows:

The "American Oil Chemists' Society Cup" for the highest efficiency in the determination of both Oil and Nitrogen on all samples is awarded to Analyst No. 41, Barrow-Agee Laboratories, Memphis, Tenn., with an average of 99.974 per cent. The average efficiency is higher than that of last year, which was 99.964 per cent. The certificate for second place goes to Analyst No. 51, T. L. Rettger, The Buckeye Cotton Oil Company, Memphis, Tenn., who had an efficiency of 99.969 per cent, as compared with 99.943 per cent for last year.

The certificate for the highest efficiency in the determination of Oil only is awarded to Analyst No. 56, Geo. W. Gooch Laboratories, Los Angeles, Calif., with an average of 99.984 per cent, as compared with 99.954 per cent for last year. The certificate for second place goes to Analyst No. 41, Barrow-Agee Laboratories, Memphis, Tenn., with an efficiency of 99.947 per cent as compared with 99.943 per cent for last year.

The certificate for the highest efficiency in the determination of Nitrogen is awarded to Analyst No. 41, The Barrow-Agee Laboratories of Memphis, Tenn., with an average of 100% as compared with 99.989 per cent for last year. The certificate for second place goes to Analyst No. 51, T. L. Rettger, The Buckeye Cotton Oil Company, Memphis, Tenn., with an average of 99.996 per cent, as compared with 99.985 per cent for last year.

We are again including in this report a list of the previous winners of the highest award for both Oil and Nitrogen. They are as follows:

1918-1919—G. C. Hulbert, Southern C. O. Co., Augusta, Ga.
1919-1920—G. C. Hulbert, Southern C. O. Co., Augusta, Ga.
1920-1921—C. H. Cox, Barrow-Agee Lab's, Memphis, Tenn.
1921-1922—Battle Lab's, Montgomery, Ala.
1922-1923—Battle Lab's, Montgomery, Ala.
1923-1924—L. B. Forbes, Memphis, Tenn.
1924-1925—E. H. Tenent, International Sugar Feed Co. No. 2, Memphis, Tenn.
1925-1926—Battle Lab's, Montgomery, Ala.
1926-1927—W. F. Hand, Mississippi State College, State College, Miss.
1927-1928—E. H. Tenent, International Sugar Feed Co., Memphis, Tenn.
1928-1929—Geo. W. Gooch Lab's, Los Angeles, Calif.
1929-1930—Southwestern Lab's, Dallas, Texas
1930-1931—W. F. Hand, Mississippi State College, State College, Miss.
1931-1932—J. N. Pless, Royal Stafolife Mills, Memphis, Tenn.
1932-1933—J. B. McIsaac, International Vegetable Oil Co., Savannah, Ga.
1933-1934—W. F. Hand, Mississippi State College, State College, Miss.
1934-1935—W. F. Hand, Mississippi State College, State College, Miss.
1935-1936—N. C. Hamner, Southwestern Lab's, Dallas, Texas
1936-1937—N. C. Hamner, Southwestern Lab's, Dallas, Texas
1937-1938—W. F. Hand, Mississippi State College, State College, Miss.
1938-1939—W. F. Hand, Mississippi State College, State College, Miss.
1939-1940—A. G. Thompson, Jr., Southern C. O. Co., Columbia, S. C.
1940-1941—Russell Haire, Planters Mfg. Co., Clarksdale, Miss.
1941-1942—T. L. Rettger, Buckeye Cotton Oil Co., Memphis, Tenn.
1942-1943—Barrow-Agee Lab's, Memphis, Tenn.

We would again commend the painstaking and careful work of Mr. T. C. Law in the preparation and distribution of samples. This year has been particularly difficult due to lack of help and difficulties with the mail service. In several instances collaborators failed to receive their samples on time, which was entirely due to delay in the mails.

J. J. VOLLERTSEN, *Chairman*

P. D. CRETIEN	R. R. KING
M. E. GRIEM	T. C. LAW
F. F. HASBROUCK	F. R. ROBERTSON

TABLE I

Determination of Oil

Analyst No.	Points Off	Per Cent Efficiency
56	3	99.984
41	10	99.947
51	11	99.941
25	23	99.877
19	24	99.872
44, 45, 53	26	99.861
7	32	99.829
70	33	99.824
1	38	99.797
50	41	99.781
24	42	99.776
60	47	99.749
43	49	99.740
10	58	99.692
26	60	99.681
63	62	99.669
68	71	99.622
17	77	99.590
6	90	99.521
62	91	99.516
42	101	99.462
15, 55	105	99.441
52	108	99.425
59	111	99.409
72	141	99.249
23, 67	142	99.245
69	150	99.202
47	162	99.128
54	170	99.095
21	265	98.590
27	492	97.381

TABLE II

Determination of Nitrogen

Analyst No.	Points Off	Per Cent Efficiency
41	0	100.000
51	1	99.996
24	8	99.960
12, 26, 50	9	99.956
25	10	99.952
42, 43	14	99.931
7	15	99.927
56	18	99.912
44	19	99.907
35	27	99.868
27	29	99.857
45, 47, 62, 67	30	99.853
63	31	99.849
19	32	99.843
60	33	99.838
55	35	99.828
1	36	99.824
10	37	99.819
52	38	99.813
17	44	99.784
70	51	99.750
15	63	99.691
53, 69	68	99.666
6	74	99.637
21	81	99.603
59	93	99.545
28	103	99.496
37	106	99.481
54	137	99.329
72	141	99.309
68	154	99.246
61	172	99.158
33	175	99.143
23	216	98.942
76	239	98.829

TABLE III

Determination of Oil and Nitrogen

Analyst No.	Per Cent Efficiency
41	99.974
51	99.969
56	99.948
25	99.915
44	99.884
7	99.878
50	99.869
24	99.868
19	99.858
45	99.857
43	99.836
26	99.819
1	99.811
60	99.799
70	99.787
53	99.764
63	99.759
10	99.756
42	99.697
17	99.687
62	99.685
55	99.635
52	99.619
6	99.579
15	99.566
67	99.549
47	99.491
59	99.477
68, 69	99.434
72	99.279
54	99.212
21	99.097
23	99.094
27	98.619

TABLE IV

Special Table

Analyst No.	Points Off	Per Cent Efficiency
	Determination of Oil	
13	27	99.856
16	34	99.820
38	48	99.744
5	50	99.733
18	51	99.729
40	142	99.245
74	144	99.233
	Determination of Nitrogen	
13	7	99.966
38	22	99.893
5	24	99.882
40	48	99.765
36	52	99.746
48	53	99.740
16	62	99.696
18	66	99.677
74	111	99.456
	Determination of Oil and Nitrogen	
13		99.911
38		99.819
5		99.808
16		99.758
18		99.703
40		99.505
74		99.345

Report of the Journal Committee 1942-1943

Your official journal Oil & Soap has been published at regular monthly intervals during the current year. There have been no changes of serious consequence in the format, style, size or other general attributes of the journal.

The Editorial Advisory Board has continued critical examination of all manuscripts and we feel that this practice has resulted in a noticeable raising of the standard of papers appearing in our Journal.

The amount of material available for publication has been sufficient to maintain the journal at about a 30-page average level throughout the year. This material has come for the most part from papers presented at the two meetings of the Society. During the current year, however, we have been fortunate in securing a considerable number of unsolicited contributions. The number of such contributions this year has been the largest in the memory of your Journal Committee. This situation should, however, not cause the Society to rest on its laurels, since we are sure that the fat, oil, or soap chemist requires a larger volume of literature to meet his needs. Our journal is still