REPORT OF THE UNIFORM METHODS AND PLANNING COMMITTEE 1935-36

ON May 29, 1936, the Uniform Methods and Planning Committee met in New Orleans on several occasions to consider and discuss the report of the various committees of the Society which had been submitted to them.

THE COTTONSEED ANALYSIS COMMITTEE:

This Committee had no definite recommendation to make for change in methods. However, the chairman had sent out a questionnaire to members of the Committee and of the Society and suggested that inasmuch as only a few replies had been received a further attempt be made to complete the questionnaire and study the replies.

FREE FATTY ACIDS COMMITTEE:

This Committee presented no report. The Uniform Methods and Planning Committee moved that the Free Fatty Acids Committee be dropped for the time being. The motion was properly seconded and adopted by the Society.

THE COMMITTEE ON THE STABILITY OF EDIBLE FATS AND OILS:

This Committee recommended the adoption of the method which they have studied as a tentative method. The Uniform Methods and Planning Committee do not agree with this recommendation because the results obtained do not warrant such adoption. Moreover, a tentative method of the Society carries with it a semi-official approval. It is recommended that the details of this method be published with the report and a reference to the Journal number and data be included in our method book, so that anyone interested would know where it could be found. The Uniform Methods and Planning Committee moves that such action be taken. The motion was seconded and considerable discussion ensued. There seemed to be a definite objection to the recommendation and the motion was lost when put to a vote.

THE MOISTURE COMMITTEE:

The only recommendation brought in by this Committee was that further work be continued on the Freas forced air circulation oven, which recommendation was concurred in by the Uniform Methods and Planning Committee and also by the Society.

THE COLOR COMMITTEE:

There was no report from this Committee and it was the suggestion of the Uniform Methods and Planning Committee that during the coming year methods applying on the reading of colors and various vegetable oils be undertaken.

COLOR GLASS DEVELOPMENT COMMITTEE:

The work of this Committee during the past two years has justified its appointment. The Committee recommends that the Editor of our Journal publish at once and in several succeeding issues a statement regarding the increased cost of standardizing glasses. The Uniform Methods and Planning Committee approve this recommendation and move its adoption. The motion was seconded and passed by the Society.

COMMITTEE ON THE REVISION OF METHODS:

This Committee inquired whether the methods on Sulphonated Oils should be published under the Soap Section or as a separate section of the methods. The Uniform Methods and Planning Committee move that a separate section be set aside for methods on Sulphonated Oils. The motion was seconded and passed by the Society.

FAT ANALYSIS COMMITTEE

This Committee made a report of progress which required no action.

COMMITTEE ON CRUDE MILL OPERATIONS:

This Committee was recently reorganized with a new chairman and had no report to make.

COMMITTEE ON REVIEW OF SCIENCE IN OILS, FAT AND SOAP:

This Committee has done some excellent work and should be continued.

THE SAMPLING COMMITTEE:

This Committee suggests that a survey of the membership be made to determine where the difficulties in sampling occur. The Uniform Methods and Planning Committee concur in this recommendation, and suggest that this Committee investigate the Carpinello sampler and report to the Society.

THE REFINING COMMITTEE:

The Refining Committee recommend that an intensive study of the refining of soya bean oil be made during the coming year. The Uniform Methods and Planning Committee confirm this recommendation and move its adoption. The motion was seconded and carried.

The Refining Committee recommends a correction in the refining methods of cocoanut oil as follows: An omission occurs in our Refining Methods as published which should be corrected by inserting in the Le Fax Methods, page 16c, paragraph 7, line 3, after "75 + 2° C.", the following parenthesis—(50 ± 2° C., for cocoanut oil). The same change should be made in the Methods as published in the Rules of the National Cottonseed Products Association, Rule 273, Section 5 (c), in the last line of page 141.

The Uniform Methods and Planing Committee concur in this recommendation and move its adoption. The motion was seconded and adopted by the Society.

The Refining Committee recommend that the paddles used in the refining apparatus be made of some metal other than brass or copper. The Uniform Methods and Planning Committee concur in this recommendation, and move its adoption. The motion was seconded and adopted by the Society.

The Uniform Methods and Planning Committee are of the opinion that the Society should have a section covering the constants of pure vegetable oils. The Olive Oil Committee are presenting such constants for that oil. We move that such a section be started, and a committee appointed to prepare the data on cottonseed, peanut, cocoanut, soya bean, palm, palm kernel and sesame oils, and that the olive oil constants be published therein. The motion was seconded and carried

THE SMALLEY FOUNDATION COMMITTEE:

This committee recommends the rejection of any reports which are received after the time designated in the announcement which will initiate the next series of samples. The Uniform Methods and Planning Committee approve this recommendation and move its adoption. The motion was seconded and approved by the Society.

The Uniform Methods and Planning Committee are of the opinion that there should be a place in our methods for the publication of methods on which collaborative work has been done, but which are not yet considered sufficiently satisfactory to be labeled "Tentative" as the latter designation carries some approval by the Society. Also that no methods be placed in the section without first being submitted to and approved by the Uniform Methods and Planning Committee. The Uniform Methods and Planning Committee move the adoption of such a plan. The motion was seconded and carried by the Society.

We wish to take this opportunity of thanking the various chairmen and members of the committees who have devoted their time during the past year to the work of the Society.

H. P. TREVITHICK
E. B. FREYER
R. C. HATTER
M. L. SHEELY
J. J. VOLLERTSEN, *Chairman*

CORRECTION

OIL & SOAP 13, p. 178 (July, 1936), *Report of Committee on Soap in Refined Oils.* Tables and language were improperly allocated in the above report, giving rise to some confusion. The closing portions of this report are herewith repeated, to replace the material appearing after page 178, column 2, line 2.

Following is the procedure of analysis as outlined for the second method:

Weigh 100 grams of oil in a 200 ml. extraction cylinder. Extract three times with 50 ml. of hot alcohol (formula 30), allow to settle, and syphon off the alcohol into a 250 ml. beaker. If emulsion is encountered, place cylinder in hot water to facilitate separation of alcohol and oil.

Evaporate the alcohol from the three extractions to about 20-30 ml. and transfer to a platinum crucible, carefully washing the beaker with alcohol and transferring to crucible. Slowly burn off the alcohol and then ignite the crucible until no carbon remains.

Cool the crucible and place into a 250 ml. beaker. Wash the crucible with about 50 ml. hot distilled water and titrate with N/50 HCl, using methyl orange as an indicator.

1 cc N/50 HCl = .00607% sodium oleate

The results obtained are shown in Table 2.

Laboratories No. 1, No. 2 and No. 3 all find a lower amount of sodium oleate than that actually incorporated. It appears that three extractions with alcohol were not sufficient to dissolve all the sodium oleate.

There was not sufficient time left for all the laboratories to reanalyze all samples using a greater number of extractions. However, laboratory No. 1 carried through same procedure and using five alcohol extractions instead of three.

Following are comparative results:

TABLE 3.

	Sample A	Sample B	Sample C	Sample D
Per cent sodium oleate incorporated.....	0.0040	0.0100	0.0050	0.0500
Laboratory No. 1—3 alcohol extractions.....	0.0030	0.0067	0.0036	0.0380
Laboratory No. 1—5 alcohol extractions.....	0.0038	0.0094	0.0042	0.0406

The above figures are very encouraging and indicate that more than three alcohol extractions were necessary to extract all the sodium oleate.

Laboratory No. 4 shows high results and states the following:

"The boiled distilled water used for taking up the alkaline ash showed slight alkalinity. The samples were reanalyzed and the distilled water was neutralized with N/50 acid employing methyl orange as indicator. The results are as follows:

TABLE 4.

	Sample A	Sample B	Sample C	Sample D
Per cent sodium oleate actually incorporated	0.0040	0.0100	0.0050	0.050
Laboratory No. 4 (reanalyzed).....	0.0061	0.0109	0.0043	0.0425

These results are much more accurate than those shown in the original analysis.

Your committee agrees that of the two methods outlined above, the alcohol extraction is the more correct in principle, but insufficient work was done to definitely outline a correct procedure. It is, therefore, suggested that this committee be allowed to function another year, and it is believed that the work will be carried to a satisfactory conclusion.

L. A. SPIELMAN,
Chairman.

N. T. JOYNER,

J. J. LAPPEN,

R. C. STILLMAN.

TABLE 2.

Kind of Oil	Sample A Cottonseed	Sample B Cottonseed	Sample C Cocoanut	Sample D Cottonseed
Per cent sodium oleate actually incorporated	0.0040	0.0100	0.0050	0.0500
Laboratory No. 1.....	0.0030	0.0067	0.0036	0.0380
Laboratory No. 2.....	0.0038	0.0033	0.0030	0.0035
Laboratory No. 3.....	0.0030	0.0070	0.0030	0.0400
Laboratory No. 4.....	0.0103	0.0161	0.0099	0.0367
Average of all laboratories.....	0.0050	0.0083	0.0049	0.0295