

Changes made in existing methods were the following: (1) the method for grinding cottonseed cake for determination of color was modified, (2) some inconsistencies with regard to designation of standard solutions were corrected in the method for free fatty acids, (3) some changes in temperature designations and color limits were made in the refining methods, (4) the language

describing the FAC color standards was changed to conform with the new composition of the standards, (5) several minor changes were made in the soap methods, particularly in the rosin determination, (6) the method for volatile hydrocarbons in soap was deleted as inadequate and was replaced by a method proposed by the Procter & Gamble laboratories, and (7) some methods

for screen test of powdered soap products were added.

The attention of the committee was directed to an inconsistency in the description of the pellet size for the fat pellet in the Wiley Melting point determination. This will be corrected in the forthcoming revisions.

W. H. Irwin, Chairman.

## REPORT OF COMMITTEE ON REVIEW OF SCIENTIFIC LITERATURE ON OILS AND FATS

The report on the third Annual Review of Scientific Literature on Fats and Oils has already appeared in two sections in the March and April numbers of OIL AND SOAP. We believe this report speaks for itself and is entirely too lengthy to be read at one of the regular meet-

ings of the Oil Chemists' Society.

The Committee wishes to acknowledge the work of Mr. M. M. Piskur, Chemical Librarian for Swift & Company. The value of this report, we believe, lies primarily in the thoroughness in which it covers the literature. It is this feature

that the Committee particularly wants to credit to Mr. Piskur.

G. R. Greenbank

G. S. Jamieson

H. A. Mattill

R. C. Newton, Chairman.

# SEED ANALYSIS COMMITTEE REPORT

THE work of the Seed Analysis Committee this season was a continuation of that done last year and has been confined entirely to a study of the fuming and preparation of the cotton seed sample. The question of the lint determination, on which a very brief preliminary report was made last year, is being studied by the Crude Mills Committee and is subject to their report.

Before taking up the details of the investigation, it was thought some interest might be felt in a comparison showing the number of tests outside of tolerance on the 1936-37 Check Seed Series with that of 1935-36:

Season	No. of Coll.	Oil	Amm.	F.F.A.	Mois.	Total
1936-37.....	39	106	83	61	56	306
1935-36.....	40	114	94	74	35	317

This comparison shows clearly that there has been no general improvement in the efficiency of the group, and also that the oil determination (apparently one of the simplest tests) has a very considerably higher percentage of error than any other. The number of tests out

of tolerance this season varied from 22 on Sample No. 6 to 41 on Sample No. 7, with no evidence that any unusual quality of the sample, such as high or low percentage of moisture or other component or off-quality, had any influence in either decreasing or increasing the number of errors.

It will be remembered that the report of this Committee last year recommended a further study of the fuming procedure as a possible cause of variation in oil results. In order to check this possibility the present fuming temperature was checked against both higher and lower ones, holding other variables the same. The results of these tests showed

that a very slight increase in temperature (5°-10° C.) gave definitely "off" results and a high degree of charring of the lint. The present temperature, with careful handling and the avoidance of lint discoloration, was satisfactory. Temperatures considerably lower than now

used gave completely satisfactory results, entirely eliminated lint charring, but carried the penalty of an increased "fluffiness" or "lintiness" of the sample. The conclusion was reached that while with careful handling under favorable conditions, the present temperature is satisfactory, it is too close to the upper limit of the fuming range to be safe and could be the source of error, especially in routine work where oven loads and sample types are so varied.

In order to check the agreement between results obtained by the present method and one using a lower temperature, Check Sample No. 3 was sent to all collaborators. The results as reported showed identical values for both oil and ammonia with about a 36% reduction in the number of errors for the Special Method. The members of the Committee also determined the remainder of the Check Series by both methods and found the average oil and ammonia values to be identical by either. No particular reduction in the number of errors was noted on this series; however, the degree of error was less using a lower temperature.

Charring or lint discoloration (the most important objection to the pres-