

fixed oils, fats and waxes, provided other substances affected by acetic anhydride (notably aldehydes, phenols and acids) are not present. It is especially applicable to essential oils, many of which contain mixtures of various alcohols. In such cases, it may be preferable to express hydroxyl content by means of hydroxyl value rather than in terms of percentage of any one alcohol. Whenever the hydroxyl content is determined by formylation as proposed by *Glichitch*,¹² the hydroxyl value will be given by the following formula:

$$H = \frac{b - a}{1 - 0.00050 b} = \frac{2003.8 (b - a)}{2003.8 - b}$$

in which

H = hydroxyl value

a = saponification value before formylation

b = saponification value after formylation

References

- (1) *Lewkowitsch, "Oils, Fats, and Waxes," Vol. I, 6th ed., p. 437, MacMillan (1921).*
- (2) *Ind. & Eng. Chem.* 18 (1926), 1346.
- (3) *Official Methods of Chemical Analysis of the American Oil Chemists' Society (1929), 41.*
- (4) *DeGroot, et al., Ind. & Eng. Chem., Analytical Edition 3 (1931), 250.*
- (5) *Lewkowitsch, "Oils, Fats, and Waxes," Vol. I, 6th ed., p. 439, MacMillan (1921).*
- (6) *Twitchell, J. A. C. S.* 29 (1907), 568.
- (7) *Cocking, Perf. & Ess. Oil Record* 9 (1918), 317.
- (8) *André, Bull. soc. chim.* (4) 29 (1921), 745.
- (9) *Cook, J. A. C. S.* 44 (1922), 392.
- (10) *Lewkowitsch, "Oils, Fats, and Waxes," Vol. I, 6th ed., p. 445, MacMillan (1921).*
- (11) *Zerewitinoff, Z. für Anal. Chem.* 52 (1913), 729.
- (12) *Glichitch, Perf. & Ess. Oil Record* 14 (1923), 401.

Note

A paper entitled "Determination of Hydroxyl Number of Oils, Fats, and Waxes," by Willard

L. Roberts and H. A. Schuette, presented during the spring meeting of the American Chemical Society at New Orleans, March 28-April 1, 1932, and published in the Analytical Edition of Industrial and Engineering Chemistry, July 15, 1932, has come to our attention since the above was written. These authors describe and recommend a new procedure for determining the hydroxyl number of oils (e. g. rancid corn oil) which yield soluble, volatile acids likely to be lost during washing and drying of the acetylated oil in the usual procedure for determining acetyl value.

Without questioning the usefulness of the Roberts and Schuette procedure in special cases, we believe that the Andre-Cook method as adopted by the A. O. A. C., the A. O. C. S., and A. C. S. is a better procedure for general use.

Although we have worked entirely independently, priority must of course be accorded Roberts and Schuette for such new subject matter as is common to the two papers, the chief item being the formula for conversion of hydroxyl value to acetyl value. In preferring hydroxyl value, based on weight of original sample, rather than acetyl value, based on weight of acetylated sample, the authors of both papers are merely following the lead of earlier workers. We sincerely hope that others in our field will interest themselves in this subject, and that acetyl value will eventually be displaced by the more useful hydroxyl value.

THE AUTHORS.

Cottonseed Oil Food Manufacturers Organize Institute

LEADING refiners of cottonseed oil and manufacturers of cottonseed oil foods, at a recent meeting in Chicago, organized an association to be known as the Institute of Cottonseed Oil Foods.

Concerns participating in the meeting, and which will be members of the Institute, were the Procter & Gamble Company of Cincinnati, the Southern Cotton Oil Company of New Orleans, the South Texas Cotton Oil Company of

Houston, Tex., the Interstate Cotton Oil Refining Company of Sherman, Tex., International Vegetable Oil Company of Memphis, Tenn., Swift & Company, Armour and Company, Wilson & Co. and the Cudahy Packing Company of Chicago.

The packing companies are large refiners of cottonseed oil and producers of cottonseed oil foods, with plants scattered throughout the South. It is expected that other refiners and

manufacturers will later unite with the organization.

Big Stocks on Hand

The cotton states annually produce over a billion and a half pounds of cottonseed oil, which is the base of the chief food industries of the South. Cottonseed oil in one form or another is widely used throughout the country and enters into numerous food products.

One of the purposes of the Institute will be to promote a wider use of this oil by the various manufacturers, and to encourage a larger con-

sumption, particularly in the South, of the various cottonseed oil foods.

The importance of stimulating a larger consumption of this Southern vegetable oil is emphasized by the fact that the industry today is faced with a one hundred per cent increase in stocks of oil on hand at the close of this season compared with the normal carry-over. The stocks of oil on hand today are approximately 1,750,000 barrels compared with the normal supply of approximately 800,000 barrels at this time of the year.

Sperm Oil

Hearing in Investigation No. 72 Under Section 336, Tariff Act of 1930

NOTICE IS HEREBY GIVEN, pursuant to Section 336 of the tariff act of 1930, that a public hearing in the foregoing investigation will be held at the office of the United States Tariff Commission in Washington, D. C., at 10:00 o'clock a. m., on the 20th day of September, 1932, at which time and place all parties interested will be given opportunity to be present, to produce evidence, and to be heard with regard to the differences in costs of production of, and all other facts and conditions enumerated in Section 336 of the tariff act of 1930 with respect to, the following articles described in paragraph 52 of Title I of said tariff act, namely,

Sperm oil, crude, sperm oil, refined or otherwise processed, and spermaceti wax.

Notice of this hearing shall be given by posting a copy thereof for thirty days prior to said 20th day of September, 1932, at the office of the Commission in the City of Washington, D. C. and at the office of the Commission at the Port of New York, and by publication prior to said date in "Treasury Decisions," published by the Department of the Treasury, and in "Commerce Reports," published by the Department of Commerce.

Cocoanut Oil

Exports during July totaled 10,467 short tons of which the United States took 10,445 short tons. Stocks at Manila July 31st totaled 5,932 short tons. Prices in drums at Manila per kilo, high, \$0.07, low, \$0.065.

Plans for Next Whaling Season Taking Shape

After the quotas for the next whaling season had been agreed upon plans were studied at once by each company or group to determine how best to utilize its share. What float-cookeries are to take part in the Antarctic catch this coming year is now fairly certain. They include A/S Bryde & Dahl's "Thorshammer," A/S Odd "Solglimt," A/S Ornen's "Ole Wegger," the Jahre, Bruun von der Lippe group's "Kosmos" and "Kosmos II," A/S Rosshavet's "Sir James Clark Ross" (others not decided), Tonsberg Hval's "Svend Foyn" (just purchased). Among other cookeries which will probably go out are "Skyttern," "New Seville," "Sourabaya," "Salvestria," "Vestfold," "Tafelberg," "Southern Empress" and "Southern Princess." A/S Hektor, A/S Globus, A/S Polaris and Cia Argentina de Pesca have not yet announced which cookeries they are sending out. (Report from Trade Commissioner Carlson at Oslo, Norway, July 9, 1932.)

Damage to Manchurian Soya Bean Crop by Flood

According to a cable from Commercial Attache Arnold at Shanghai, dated August 13, the Mukden office reports that the flood damage to all crops in North Manchuria is estimated at 50 per cent but damage to South Manchuria is negligible.

A cable from the American Consulate at Peiping dated August 11, states that thousands of tons of beans stored at Harbin and Sansing, and at other points along the Sungari have been lost.