

and after heating to 160° no precipitation occurred. Figure 2 presents this data graphically.

Thus, while the pyridine-aniline method will precipitate gossypol from hot pressed oils which give negative results with former procedures, there is still a possibility that many crudes contain a "heat-modified" or strongly bound gossypol which is non-precipitable. In support of this opinion, it has been found that some crudes which have the refining properties of high gossypol oils do not give a precipitate with pyridine and aniline; and this same type of oil can be simulated by heating an oil containing precipitable gossypol to 100-120° C. Consequently the pyridine-aniline method has proved useful in checking cooker and press condition with regard to overheating, moisture, and length of cook in the crude mill. Also the method has been tested tentatively for the estimation of free gossypol in meal with excellent success, comparing favorably with the Halvorsen-Smith⁶ procedure for this purpose.

Summary

1. Pyridine promotes the precipitation of gossypol by aniline from oil solutions. A quantitative method for the

estimation of gossypol in crude hot pressed cottonseed oil is outlined, which involves the use of a pyridine-aniline (4:1) reagent.

2. Samples of crude oils from six different mills analyzed from 0.049 to 0.105 per cent gossypol.

3. Gossypol in crude oils is rendered non-precipitable by heating the oil to 150° C. for 30 minutes. Heating at lower temperatures decreases the yield.

4. Photomicrographs are presented which show the crystal form of dianiline gossypol precipitated in the presence of pyridine.

This work was carried out under the direction of L. C. Haskell, to whom grateful acknowledgment is made. The writer is indebted to M. C. Kibler for assistance in conducting the analyses.

Literature Cited

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- ⁴Clark, *Ibid.*, **6**, 7, p. 15 (1929).
- ⁵Jamieson, Vegetable Fats and Oils, A. C. S. Monograph 58, p. 175.
- ⁶Halvorsen and Smith, Ind. Eng. Chem., Anal. Ed., **5**, 1, p. 29 (1933).
- ⁷Schwartz and Alsberg, J. Agr. Research **25**, p. 285 (1923).

Welcome to New Members

The Membership Committee of the American Oil Chemists' Society is endeavoring to contact every chemist who is a prospective member of our Society, and it is hoped that the response will be even greater than anticipated.

Your Committee would like to encourage every member of the Society to do his utmost to interest someone in the work of their organization. We believe that the Society can be helpful to the chemists of our industry and we know the Society needs the co-operation of every man of his profession interested in the welfare of the oil and soap industry:

The following new members have recently been added to the roll:

P. J. Monks, % Swift & Co., E. St. Louis, Ill.

W. B. Byers, The Southern Cotton Oil Co., Goldsboro, N. C.

Stuart R. Evans, 460 E. Ohio St., Chicago, Ill.

J. W. Schrank, Lever Bros. Co., Cambridge, Mass.

Wm. E. Jouvenat, % Transit Milling Co., Sherman, Texas.

John R. Shipner, % Cudahy Packing Co., Omaha, Neb.

Lawrence D. Whiting, % Ballard & Ballard, Louisville, Ky.

Carl P. Brenner, % Buckeye Cotton Oil Co., Atlanta, Ga.

T. A. Gierahn, % The Southern Cotton Oil Co., Chicago, Ill.

M. A. Middlebrooks, % The Battle Laboratories, Montgomery, Ala.

A. G. Thompson, Jr., % The Southern Cotton Oil Co., Columbia, S. C.

T. G. Richert, 91 New St., Nutley, N. J.

V. C. Mehlenbacher, % Swift & Co., Refinery, Los Angeles, Cal.

Wm. A. McConlogue, Carmen & Co., Inc., Boonton, N. J.

H. B. Richie, % Swift & Co., Chicago, Ill.

R. H. Acock, Oil Mill Laboratory, Austin, Texas.

We welcome them into our Society and hope that they will co-operate with the Society for their own welfare and the advancement of the American Oil Chemists' Society.

W. D. HUTCHINS, Chairman,
Membership Committee.

Announcements

1. THE SEVENTH FALL MEETING of the American Oil Chemists' Society will be held in the Florentine Room of the Congress Hotel on October 12 and 13, 1933. On account of the crowded conditions of the Chicago hotels, we suggest you make your reservations at once, preferably at our headquarters, the Congress Hotel.

2. REGISTRATION will start at 9 o'clock Thursday, October 12. There will be the usual nominal registration fee of \$1.00 to take care of the incidental expense of the Convention.

3. INFORMAL LUNCHEONS. We expect to continue our practice of having our informal lunch-

eons at which there will be no speakers, in the Pine Room of the Congress Hotel, on Thursday. Tickets for the luncheon may be secured at the Registration desk.

4. TRIPS. Because of the fact that the Century of Progress will undoubtedly attract most of our members when not engaged in some of our own activities, no special trips have been arranged. However, the committee will, as far as possible, arrange any special trips which are desired by our members.

5. ENTERTAINMENT. The Local Committee has arranged this year to hold their Annual Bowling Tournament at the Medinah Michigan Avenue Club, 505 North Michigan Avenue. The Bowling Tournament will be preceded by an informal dinner in the Minaret Room of the Club at which the ladies will be guests of the Society. We have arranged for the exclusive use of the bowling alleys and have also arranged for a card room, and there will be a card party for both the ladies and men not caring to participate in the bowling. We have also arranged for the use of some of the other facilities of the Club, such as Ping Pong, Billiards, etc.

The Medinah Michigan Avenue Club is one of the show places of Chicago and everyone should arrange to reserve this evening.

GOLF. Since our meeting has been advanced approximately two weeks, weather permitting, arrangements will be made for a Golf Tournament on Friday afternoon, October 13. Mr. L. M. Tolman is Chairman of this Committee and we suggest you write him and give him your entry.

FOOTBALL. There is only one football game in the Chicago area on Saturday, October 14. This is an intersectional game between Leland Stanford University and Northwestern University. If you wish to attend this game it will be necessary for you to make arrangements Thursday with the Local Committee.

EXHIBITS. Our exhibits of chemical equipment have always been the most attractive of any show in the country. We will again have a complete exhibit in the Florentine Room of the Congress Hotel.

SPECIAL COMMITTEE MEETINGS There will be special meetings of the Soap Committee and the Fat Analysis Committee at a convenient time during the Convention. Watch the Bulletin Board.

Eduard Muller G.m.b.H., Halle a.d.S.

The leading position in the Wollfett market is held by Eduard Muller, G.m.b.H. He controls the production of all Wollfett. He is the exclusive representative of one of the largest wool combing concerns in the world, the Bremer Wollkammerei, Blumenthal/Unterweser. Wollfett is used in pharmaceutical, cosmetic and soap manufacturing industries. The color and consistency are of the highest quality. Herr Muller is the outstanding figure in the wool fat industry.

A. O. C. S. Bowling Tournament

Plans have now been completed for the Annual Bowling Tournament which will be held this year at the beautiful Medinah Michigan Avenue Club on Thursday evening, October 12, at 7:00 p. m. Bowling will be preceded by an informal dinner in the Minaret Room of the Club at 6:00 p. m. The Local Ladies' Committee has arranged for a card party for those who do not bowl.

Competition in the 5-man event will be for a new cup presented to the Society by the American Maize Products Co. This trophy is a beautiful example of modernistic designing and will become the property of the high scoring team for the ensuing year.

A long list of prizes of practical utility are also being offered for the winners of the singles and



Medinah Michigan Avenue Club

doubles events and for the runners-up in the five-man competition. A special blind handicap event assures everybody a chance to win a prize.

Those who have participated in previous annual tournaments know that an evening of sport and good fellowship is assured. With the added features of a dinner and card party on the same evening, the tournament this year promises to be the greatest ever held.

There is still time to enter the competition as the committee will try to accommodate all who wish to bowl or attend the dinner or card party and will make reservations up until noon, October 12. It will help considerably, however, to have as many as can make their reservations in advance. Entries and reservations can be made with A. E. King, % Swift & Co. Laboratories, Chicago, or at the registration desk at the Congress Hotel.

The Local Committee heartily recommends that every registrant arrange to spend the evening of October 12 at the Medinah Michigan Avenue Club.