

**ADDRESSES BEFORE THE AMERICAN CHEMICAL SOCIETY,
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The Composition of Corn Wax. R. L. Shriner, F. P. Nabenhauer, and R. J. Anderson. The solid material that separates when crude corn oil is chilled has been examined and found to be a wax consisting of a mixture of the myricyl esters of two fatty acids. The myricyl alcohol was isolated and shown to be identical with that obtained from beeswax. The acids were separated by fractional distillation of their methyl esters and found to be a C_{22} acid melting 76-7 and a C_{24} acid melting 85-6. The latter was shown to be *n*-tetracosanoic acid by means of a mixed melting point, but the C_{22} acid is not identical with *n*-docosanoic acid. It is apparently identical with isobehenic acid, obtained as a degradation product of lignoceric acid.

Synthetic Diets for Growth and Reproduction: Observations on the Existence of Vitamin E. (By title). V. E. Nelson and R. L. Jones. Rats were given the following diet: casein 18 per cent, salt mixture 185, 3.7 per cent, yeast at various levels from 5.0 to 16 per cent, butter fat 5 per cent and the remainder to 100 per cent was composed of dextrin. Although growth was normal, reproduction was abnormal. Animals were carried through the sixth generation on diets containing yeast as the sole source of vitamin B and butter fat as the only source of fat soluble vitamins. A large number of the females gave birth to only one litter and then ceased to have more young. The mortality of the young was high. On the same types of diets with cod liver oil at a level of 5 per cent instead of butter fat many more litters have been born and the rats have been carried so far through the third generation. The results are close to normal. The manner in which the cod liver oil is fed has a decided influence on the reproduction process. If butter fat contains vitamin E, then cod liver oil is a much richer source of this vitamin.

ABSTRACTS FROM OTHER JOURNALS

Recovery of Oils and Fats from Finely Divided Bleaching Materials or the Like. Harburger Eisen u. Bronzwerke, A. G. German Patents, 426,712, 7. 7. 21.

The oil or fat contained in used decolorizing carbon or Fuller's earth may be recovered by heating the mass with a diluted solution of sodium hydroxide at 100° in an autoclave fitted with a stirring device, then raising the temperature and pressure after addition of diluted salt solution, and finally allowing the mixture to cool without agitation.

The alkali and salt treatments cause the surface tension between the solid particles of the oil and fat to be so far reduced that the two separate; the carbon or Fuller's earth settling to the bottom of the vessel, and the oil or fat forming a layer on the surface of the solution. (British Chemical Abstracts B. Aug. 6, 1926.)

Further Notes on the Crystalline Bromides of Linseed and Some Other Drying Oils. Harold Toms, *The Analyst*, Aug. 1926. Gives description of experimental work and the properties of the various bodies produced, such as tetra and hexabrom stearic acids, ethyl hexabromostearate, etc.

Detection of Olive Oil Obtained by Extraction with Solvents. S. Fachini. (Giorn. Chim. Ind. Appl. 1926, 8, 178-179.)—Olive oils obtained with the help of solvents and those which have been extracted from the pressed residue and then refined are readily identified, even when present in small proportion, in olive oil obtained by pressure, by the following reaction, which is similar to Morawsky's reaction for resins. Two or three c. c. of the oil are heated in a test-tube, with an equal volume of acetic anhydride, the liquid being then shaken for a short time, cooled, and filtered through a small filter previously wetted with acetic anhydride. When brought into contact in a porcelain dish with a few drops of concentrated sulphuric acid, the filtrate soon yields a cherry-red coloration. Addition of a few c. c. of water to the product of this reaction gives a more or less intense green coloration, which gradually disappears. (T. P. H. in *The Analyst*.)

Evidence of Decomposition in Oils and Fats. J. Stamm. (Bull. Soc. Pharm. Esthonia, 1925, 5, 181; J. Pharm. Chim., 1926, 118, 214-215.)—Phenylhydrazine (2 mol.) and urethane (1 mol.) react to form diphenylcarbazide. To 10 drops of oil, or a little of the melted fat mixed with vaseline are added 5 drops of the reagent obtained by mixing 0.1 grm. of diphenylcarbazide in 10 c. c. of pure vaseline oil, and the mixture is heated for 3 minutes. Fresh oils give no coloration; a faint pink color results in the presence of 1 to 1.5 per cent. of free acidity, and if flavor and taste are satisfactory the oil is to be regarded as of good quality. If a red color results, even if the oil is organoleptically sound, rancidity will soon develop. (D. G. H. in *The Analyst*.)