

and capric acids. These diagrams have been presented together with pertinent data and a description of a tested procedure for preparing these acids from readily available raw material.

REFERENCES

1. Armstrong, E. F., *et al.* *J. Soc. Chem. Ind.*, **44**, 63T (1925).
2. Grün, Ad., and J. Janko, *Deut. Oel. Fett-Ind.*, **41**, 553 (1921).
3. Schuette, H. A., *et al.* *Oil and Soap*, (a) **16**, 209 (1939); (b) **17**, 155 (1940); (c) **20**, 263 (1943); **22**, xxx (1945).

Referee Board Report

The Referee Board has only routine activity to report for the year 1944-5. Twenty-seven Referee Certificates were issued, as already published in *Oil & Soap*. The usual 10 check samples of cottonseed were distributed. The number of check oil samples was reduced to a single series consisting of three sam-

ples each of crude cottonseed and of crude soybean oil.

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Abstracts

Oils and Fats

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THE FUTURE OF SOYBEAN OIL. O. H. Alderks. *Chem. Eng. News*, **23**, 1168-70 (1945). During 2 world wars the use of soybean oil has jumped tremendously. After World War I it declined just as rapidly, but after reaching a low point in 1928, consumption began to expand again, gradually at first, then rapidly to where it now challenges cottonseed oil for leadership in production and use. Agronomic improvement and better technology in refining and processing have improved the competitive outlook for soybean oil in postwar years.

DETECTION OF OLIVE OIL IN EDIBLE OIL MIXTURES. J. Fitelson. *J. Assoc. Off. Agr. Chem.* **28**, 283-4 (1945). The method depends on the determination of squalene. Olive oil contains considerably more squalene than the other common edible oils. The squalene content of edible vegetable oils were: olive 136-708 mg. % (average 383), cottonseed 3-15 (8), peanut 8-49 (27), corn 16-42 (28), soybean 5-22 (12), sunflower 8-19 (12), teaseed 8-16 (12), sesame 3-9 (5) and rape 24-28 (26).

INVESTIGATION OF THE SEED OILS OF SOME SUDAN MIMOSACEAE. D. N. Grindley. *J. Soc. Chem. Ind.* **64**, 152 (1945). The seeds of this family have a very low content of fixed oils, which are rather dark in color and contain a high proportion of unsaponifiable matter. The fatty acids consist in most cases of 20-30% of saturated acids, including about 3% of higher acids (arachidic, behenic and lignoceric), the balance being a mixture of oleic and linoleic acids in proportions varying from about 2:1 to 3:4 according to the species.

OBSERVATIONS ON TESTS FOR SUPPOSED α -DICARBONYL COMPOUNDS IN AUTOXIDIZED FATTY SYSTEMS. H. Jasperson, R. Jones and J. W. Lord. *J. Soc. Chem. Ind.* **64**, 143-5 (1945). The colorimetric tests for α -dicarbonyl compounds proposed by Prill and by O'Daniel and Parsons have been applied to the specific dicarbonyls, diacetyl and diketostearic acid, and to autoxidized ground-nut oil and Me linoleate. Spectroscopic examination of the colors has shown that in autoxidizing fatty systems the substances responsible for the colors are not necessarily dicarbonyls.

THE EFFECT OF THERMAL TREATMENT AND HYDROGENATION ON THE ABSORPTION OF A FEW VEGETABLE OILS. A. Roy. *Ann. Biochem. Exptl. Med.* **4**, 17-22 (1944). The oils examined were fed to normal adult rats previously maintained on a fat free diet, a portion of this diet being replaced by an equivalent amount of the oil. The fats were fed in the normal state or after heating at 200, 250 or 275° for one hour or 300° for 45 minutes. Groundnut and coconut oils were also fed after hydrogenation to different degrees. Except in the case of groundnut oil all the oils showed a decrease in absorption after submission to thermal treatment but no effect after hydrogenation. Determination of the I value of the fats showed that this decrease in absorption was not related to the degree of unsaturation but appeared to be related to the rate of hydrolysis of the fats by lipase. (*Nutr. Abs. & Revs.* **14**, 690).

SOUTH AFRICAN FISH PRODUCTS. XVI. THE COMPONENT ACIDS OF THE HEAD, BODY, LIVER AND INTESTINAL OILS OF THE JACOPEVER (*SEBASTICHTHYS CAPENSIS*, GMEL.). N. J. Van Rensburg, W. S. Rapson and H. M. Schwartz. *J. Soc. Chem. Ind.* **64**, 139-40 (1945). The jacoever has already been characterized as a fish with a diffuse system of fat storage. The liver oil is distinguished by its tendency to a lower degree of unsaturation than the corresponding head, body and intestinal oils, and by an inverse relationship between the content of oil in the liver and its I value. As a first step in the precise location of these effects, the component acids have been determined in the head, body, liver and "intestinal" oils from the jacoever in moderately fat condition. It has been found that these jacoever oils conformed in type to those from other fish with diffuse systems of fat storage. In relation to the head, body and intestinal oils, the liver oil was distinguished by an enhanced content of C₁₆ and C₁₈ unsaturated acids and a decreased content of the more highly unsaturated C₂₀ and C₂₂ acids.

SOUTH AFRICAN FISH PRODUCTS. XVII. THE COMPONENT ACIDS OF THE LIVER OIL OF THE STOCKFISH (*MERLUCCIVUS CAPENSIS*, CAST.). N. J. Van Rensburg, W. S. Rapson and H. M. Schwartz. *J. Soc. Chem.*