

and possessing the odor and taste of copra (Fig. 2). On a dry basis, the outer fibrous portion consists of about 23 per cent, the shell about 69 per cent and the kernel about 8 per cent of the weight of the fruit. Analyses of these three portions are given in Table I.

TABLE I  
Composition of the Fruit of *Arecastrum Romanzoffianum*  
(On a Moisture-Free Basis)

	Husk	Shell	Kernel
Crude Fat (ether extract), per cent..	0.65	0.50	52.20
Ash, per cent.....	4.63	2.40	1.97
Protein (N x 6.25), per cent.....	4.37	2.73	10.37
Total Sugars (as invert), per cent....	28.35	4.27	4.87
Crude Fiber, per cent.....	19.85	45.29	17.97
Undetermined, per cent.....	42.15	44.81	12.62
Total.....	100.00	100.00	100.00

*Preparation of the Kernel Oil.* The fruit, after falling from the tree, was placed on screened trays and allowed to dry in the sun. The air-dried material was cracked with a hammer and the kernel removed by hand. The kernels thus obtained were then pressed in a Carver press to remove the oil which was subsequently heated for a short time at 100° C. and filtered, using a filtering aid. The filtered oil contained 0.08 per cent volatile constituents (2).

*Characteristics of the Oil.* The cold-pressed oil was light amber in color and possessed an odor and taste similar to coconut oil. It melted at 18° C. (uncorr.). The chemical and physical characteristics of the oil were determined by the usual procedures (2), with the results given in Table II.

*Discussion of Results.* Due to the presence of saturated acids of lower molecular weight than myristic, the saturated and unsaturated acids were calculated, using the formulae given by Jamieson (3).

The oil is non-drying and similar to palm kernel oil in physical properties.

TABLE II  
Chemical and Physical Characteristics of the Kernel Oil From *Arecastrum Romanzoffianum*.

Specific Gravity 25°/25° .....	0.9194
Refractive Index N <sub>D</sub> 20° C.....	1.4580
Free Fatty Acids (as oleic), per cent.....	0.19
Saponification Value.....	239.5
Iodine No. (Hanus).....	28.4
Unsaponifiable Matter, per cent.....	0.41
Unsaturated Acids,* per cent.....	27.20
Saturated Acids,* per cent.....	68.10
Polenske No.....	0.85
Acetyl Value (A.O.A.C.).....	3.5
Hehner Value.....	88.4
Thiocyanogen No.....	24.5
Reichert-Meissl Value.....	0.72

\* Calculated from thiocyanogen and iodine numbers.

### Summary

The nuts and oil from *Arecastrum Romanzoffianum* have been examined. Full-grown dried nuts from a mature tree average 23 per cent of fibrous husk, 69 per cent of shell and 8 per cent of oily kernel. The dried kernel contains about 52 per cent of oil of a non-drying character, and somewhat similar to palm kernel oil in physical properties. The chemical and physical characteristics of the kernel oil are: Sp. G. 25°/25°—0.9194; Refrac. Index N<sub>D</sub> 20° C.—1.4580; Free Fatty Acids (as oleic)—0.19 per cent; Saponification Value—239.5; Iodine No. (Hanus) 28.4; Unsaponifiable Matter—0.41 per cent; Pol. Value—0.85; Acetyl Value—3.5; Hehner Value—88.4; Thiocyanogen No.—24.5; R-M Value—0.72.

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## Report of the Uniform Methods and Planning Committee

The Uniform Methods and Planning committee has received only one report and that was from the Soap Analysis committee.

This committee has been doing some work on the determination of tetrasodium pyrophosphate in soap. The procedure reported in brief is as follows:

1. Obtain alcohol insoluble in usual manner.
2. Dissolve alcohol insoluble in water and adjust to pH of 3.8, using glass electrode.
3. Add a measured excess of zinc sulphate solution and
4. Titrate liberated sulphuric acid with standard alkali, again using glass electrode in determining the end point.
5. Standardize alkali to be calibrated against recrystallized tetrasodium pyrophosphate, using glass electrode in the same manner as in the actual determination."

The Uniform Methods and Planning committee approved the report of the Soap Analysis committee and recommended the adoption of this method as tentative. This recommendation was adopted by the society.

There was a request from the Finished Materials Standards committee of the National Soybean Processors association that the Fat Analysis committee be requested to change the F.F.A. range from 0-0.5 per cent to 0-0.2 per cent specifying 56.4 gms. as the sample weight and that 0.5-1.0 per cent be changed to 0.2-1.0 per cent with 28.2 gms. as the sample weight. The Uniform Methods and Planning committee have considered this request and have approved the change. The society adopted this recommendation.

The Fat Analysis committee recommended a few changes in the specifications for the titer thermometer, so as to get the same instrument adopted by the A.S.T.M. Inasmuch as these changes are all of minor character, being largely editorial, the Uniform Methods and Planning committee recommended that they be approved and the society adopted this recommendation.

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