I. THE CHEMISTRY OF THE PRODUCTS OF *COCOS NUCIFERA*. II.

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As a preliminary to the investigation, which is now in progress, of the cellulase and lipase present in the haustorium of *Cocos nucifera* it was thought that an examination of the properties of the "milk" of the nut, in which the haustorium develops during germination, would indicate the optimum conditions, particularly p_H , under which the enzymes act. It was also thought that it would be of interest to examine at the same time the variations, if any, in the properties of the liquid as the nut matures, especially since it not only persists but increases during all the stages of growth of the nut.

Bunch No.	Sp. gr.	p_H	Total solids %	Ash % of total solids
11	1.014	5.1	4.01	18.99
10	1.014	4.9	4.29	14.76
9	1.016	4.8	4.66	12.95
8	1.021	5.0	5.66	12.09
7	1.025	5.2	7.31	9.94
6	1.021	5.3	6.17	11.12
5	1.018	5.4	5.16	11.76
4	1.018	5.1	5.38	11.58
3	1.014	5.1	4.65	13.01
2	1.019	5.0	4.72	14.05
1	1.015	4.8	4.83	11.77

During germination.

No. of weeks	Sp. gr.	p_H	Total solids %	Ash	Weight of haustorium g.
0	1.015	4.8	4.83	11.77	0
10	1.015	5.6	4.42	12.83	1
11	1.014	5.6	4.27	13.13	9
12	1.014	5.6	4.61	12.60	16
13	1.013	5.6	4.16	12.38	1
14	1.014	5.6	4.62	11.84	21
15	1.008	5.5	2.90	14.30	68
16	1.015	5.3	3.92	11.37	78
17	1.020	5.9	5.02	11.74	3

Nuts from the youngest to the oldest bunches were obtained from each of six palms from various parts of the Island. Those of the oldest bunches were put away to germinate and the "milk" examined at intervals.

The results, one typical series of which is given on p. 3, show the following properties.

(1) The temperature of the liquid immediately after picking the nut is about 1° below air temperature although the nut is exposed to direct sunlight.

(2) The specific gravity varies in the different sets but increases in each with age.

(3) p_H varies between 4.6 and 5.6 but the value for each set is nearly constant, not changing with age, in spite of the decrease of mineral matter (shown by ash %).

(4) Even while germination proceeds p_H remains constant and is nearly the same as the optimum for *Ricinus* lipase observed by Willstätter and Waldschmidt-Leitz.