

# SCIENCE

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## FUNCTIONS OF AN ECOLOGICAL SOCIETY<sup>1</sup>

By Professor R. E. COKER  
UNIVERSITY OF NORTH CAROLINA

PERHAPS you know that there are two chief reasons for a presidential address, reasons that most people are too polite to mention. One is the gracious desire to flatter the president by making him think he is expected to have something to say that will be interesting or instructive to the members, which may or may not be the case at all; the other is to let people know who is the president. When a man is elected to the presidency of a national society he enjoys justifiably a feeling of great pride; he may even experience a degree of inflation, but that soon subsides as he learns that few know and even fewer care who is president. In a country school near my old home, there was a boy well along in the grades who did not know who was the chief executive officer of the United States. The teacher, wanting to shame or to impress him, told him to go home and ask his father. The

boy went and returned. "Well, Johnny," said the teacher, "did your father tell you who was president?" Johnny arose with an obviously triumphant air, as he replied, "I axed paw and he don't know." Johnny was destined to become a political orator with a flair for the dramatic. He indulged in a rhetorical pause before he added: "Paw don't know who is President—and what's more, he don't give a damn!"

Early in the year some friends intimated that perhaps the society would be pleased if I should bring to an end the practice of having annual presidential addresses. In acceptance of this challenge, I seemed to have two choices: one was to allow the custom to lapse forthwith; the other was to deliver an address to end all presidential addresses. It occurred to me that I might do both. The matter to follow, then, will probably not meet the specifications of a presidential address and it may lead to a conclusion that will discourage the desire, at least, for future addresses of a

<sup>1</sup> Address delivered by the president of the Ecological Society of America at the annual dinner in Indianapolis, December 28, 1937.

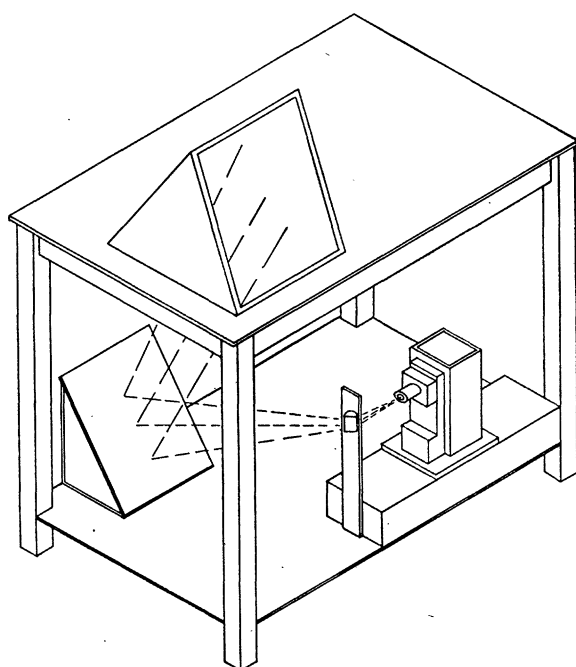


FIG. 1

pareneces or examining x-ray films. The device has given satisfactory service, and the image is bright enough ordinarily to be read in a lighted room.

D. H. COOK  
J. H. AXTMAYER

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#### A METHOD OF DETERMINING ASCORBIC ACID IN SKIN<sup>1</sup>

SKIN is unsuitable for treatment by the customary procedures for the extraction of vitamin C from tissues.<sup>2</sup> A method has been devised based upon the ability of collagen to soften and swell when heated in acid solutions. The samples of skin are weighed, minced with scissors and placed in large test-tubes with 10 cc of a solution containing 8 per cent. acetic<sup>3</sup> and

TABLE I  
GUINEA-PIG SKIN MINCED AND SAMPLED IN TRIPPLICATE FOR DETERMINATION OF VITAMIN C

Sample of skin	Ascorbic acid
1.0 gm	mg/gm
1	0.0397
2	0.0404
3	0.0404
1*	0.0007
2*	0.0007
3*	0.0000

\* 4th washing.

<sup>1</sup> From the Division of Laboratories and Research, New York State Department of Health, Albany.

<sup>2</sup> O. A. Bessey and C. G. King, *Jour. Biol. Chem.*, 103: 687-698, 1933.

<sup>3</sup> Trichloroacetic acid is broken up on heating and can

2 per cent. metaphosphoric acid. The tubes are drawn out with a blast lamp and sealed after evacuation of the air. They are then placed in boiling water for twenty minutes, opened immediately upon removal, and the contents transferred to a second tube for centrifugalization. After the supernatant fluid has been decanted, the sediment, consisting of softened pieces of skin, is broken up in the tube with a glass rod and

TABLE II  
GUINEA-PIG SKIN MINCED AND SAMPLED IN QUADRUPPLICATE FOR THE DETERMINATION OF VITAMIN C IN THE PRESENCE OF ADDED ASCORBIC ACID

Sample of skin	Ascorbic acid added	Ascorbic acid determined	Added ascorbic acid recovered
0.5 gm	mg	mg	mg
1	0	0.0235	0
2	0	0.0235	0
3	0.100	0.1134	0.0899
4	0.100	0.1098	0.0863
-	0.100	0.0915	0.0915

washed with 2 cc of 8 per cent. trichloroacetic- and 2 per cent. metaphosphoric-acid mixture and again centrifugalized. This procedure is twice repeated. The pooled supernatant fluids are then titrated with 0.05 per cent. 2,6-dichlorophenolindophenol solution according to the method of Bessey and King. The tables illustrate the agreement between samples and the recovery of added vitamin C.

The method has been in constant use for the past year and has given consistent and reproducible results.

CALVIN C. TORRANCE

not be used at this step. The digested skin is later washed with trichloroacetic acid to precipitate the proteins.

#### BOOKS RECEIVED

- BOYCE, JOHN S. *Forest Pathology*. Pp. x+600. 216 figures. McGraw-Hill. \$5.00.
- DODDS, GIDEON S. *Essentials of Human Embryology*. Second edition. Pp. ix+316. 182 figures. Wiley. \$4.00.
- FENNEMAN, NEVIN M. *Physiography of Eastern United States*. Pp. xiii+714. 197 figures. McGraw-Hill. \$6.50.
- HALL-QUEST, ALFRED L. *Kappa Delta Pi, 1911-1936*. Pp. viii+499. Illustrated. Macmillan. \$3.25.
- Japanese Journal of Zoology; Transactions and Abstracts*. Vol. VII, No. 3. November 20, 1937. Pp. 347-503+10. Illustrated. National Research Council of Japan, Tokyo.
- McAFEE, JOSEPH E. *College Pioneering; Problems and Phases of the Life at Park College During Its Early Years*. Pp. 264. Illustrated. Alumni Parkana Committee, Kansas City.
- MILLIKAN, ROBERT A., HENRY G. GALE and CHARLES W. EDWARDS. *A First Course in Physics for Colleges*. Revised edition. Pp. xiii+712+lxii. Illustrated. Ginn. \$4.00.
- Proceedings of the Fourth International Locust Conference, Cairo, April 22, 1936*. Government Press, Bulâq.
- WARD, F. KINGDON. *Plant Hunter's Paradise*. Pp. 347. Illustrated. Macmillan. \$3.50.
- WEAVER, JOHN E. and FREDERIC E. CLEMENTS. *Plant Ecology*. Second edition. Pp. xxii+601. 271 figures. McGraw-Hill. \$5.00.

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By JOSEPH B. NIEDERL, PH.D., *Associate Professor of Chemistry*, and VICTOR NIEDERL, *Teaching Fellow*; both at New York University, Washington Square College.

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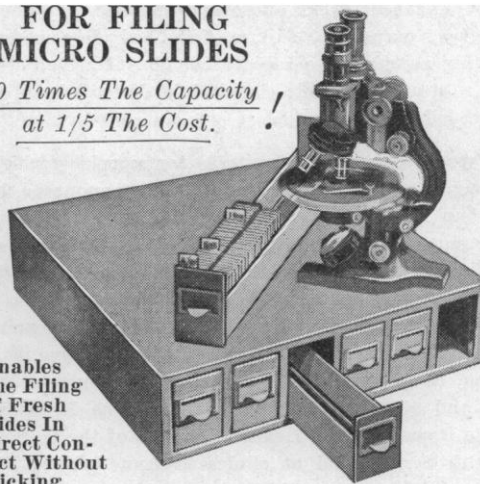
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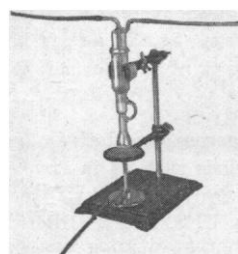


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