

on the amylolytic action, in concentrations ranging from 0.01 to 0.0001 *M* (covering approximately the range of concentrations used by the previous authors): tryptophane, proline, nicotinic acid, β -indole acetic acid, β -indole propionic acid,² α -naphthalene acetic acid,³ and 1-4 dichlorophenoxyacetic acid.⁴

None of these compounds has shown the slightest inhibiting power under the above-mentioned conditions. It is therefore certain that human amylase is not inhibited by the indole derivatives and other plant hormones that have been mentioned.

ED. H. FISCHER
J. FELLIG

Department of Organic Chemistry
University of Geneva

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² All the preceding substances are pure biochemicals from Hoffmann-La Roche Inc., Basel.

³ Prepared in our department.

⁴ From American Chemical Paint Co., Ambler, Pa.

Isolation of Ascorbic Acid and Rhamnosides from Sea Water

THE presence in sea water of a substance that is physiologically active in oysters and that can be measured photometrically with *n*-ethyl carbazole has been reported by Collier, Ray, and Magnitzky (1). Comparison of the *n*-ethyl carbazole absorption spectrum formed in sea water with spectra of pure carbohydrates led to the conclusion that more than one carbohydrate was taking part in the determination. Methods to isolate and identify the compounds were then sought.

The carbohydrates were removed from sea water onto a column of activated charcoal, as described by Whistler and Durso (2). They were then removed from the column by elution with ethanol. Evaporation of the eluate gave two white crystalline compounds, which were separated by their different solubilities in 50% ethanol. The substance that precipitates in 50% ethanol, as yet unidentified, gives some indication of being a rhamnoside.

Evaporation of the alcohol-water mixture produced a crystalline compound which, in water solution, gave an ultraviolet absorption spectrum similar to that reported for dehydroascorbic acid by Herbert, Hirst, Percival, Reynolds, and Smith (3).

In order to study the similarity between the absorption spectra more closely, we prepared a solution

of dehydroascorbic acid by oxidizing ascorbic acid in the presence of Cu ++. The absorption spectrum of this oxidation product agreed very closely with that of our compound from sea water, both in water and in 79% H₂SO₄. The colors resulting from the reaction of the oxidized ascorbic acid and from our sample with 2,4-dinitrophenyldrazine exhibited the same spectra. The amount of sample available was too small to allow any extensive recrystallization and, therefore, any comparison of melting points with those reported in the literature was not feasible.

Absorption spectra from samples of sea water taken in various parts of the Gulf of Mexico agreed closely with the spectra we had run on oxidized ascorbic acid. We concluded from these curves that the vitamin is present in the sea largely in the form of dehydroascorbic acid. The amounts of vitamin as shown by the absorption spectra did not agree with the calculated amounts of carbohydrate found by the *n*-ethyl carbazole method. The discrepancy is probably due to the as yet unidentified "rhamnoside," which shows some color with *n*-ethyl carbazole. This "rhamnoside" is by far the most abundant carbohydrate in sea water. We have found concentrations as high as 0.1 g/l of the "rhamnoside" from inshore waters.

PETER J. WANGERSKY

Gulf Fishery Investigations
U. S. Fish and Wildlife Service
Fort Crockett, Galveston, Texas

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Experts' Biases about the Older Worker¹

IN OUR industrial economy, which is characterized by rapid technological change, increasing mechanization, and increasing specialization, youth and speed are at a premium. The overemphasis on youth is accompanied by a corresponding underestimation of age, with the result that individuals are fearful about aging. This value system has given rise to complaints and erroneous beliefs about the abilities, skills, and personality structure of the older worker.

During the past year the attitudes of several groups toward the older worker were investigated. The groups differed in age, educational background, and socioeconomic status, and they included undergraduate students, graduate students, middle-aged nonprofessional workers and their wives, and retired men and women living in the community and in homes for the aged. Attitudes were measured by their agreement or disagreement with a questionnaire of 51 statements about the older worker. Some of the statements covered physical decline; others covered mental decline; still

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