

The method is in constant use in this Laboratory. Although the procedure is long, it is actually less cumbersome to manipulate than the standard method and much more certain in its results.

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Note on the Esterase Character of Pectase (Pectin-demethoxylase)

BY Z. I. KERTESZ

Von Euler¹ proposed the name pecto-lipase for the enzyme pectase, which splits off methoxy groups from pectin and forms a gel from it under suitable conditions. Though this name indicates the esterase character of pectase, it does not specify its action. Other compounds (acetic acid) might also be attached to the molecule by ester linkages, but it is likely that the splitting off of these groups is indifferent from the standpoint of gel formation.

It was of considerable interest to see whether other ester-splitting enzymes are able to produce gels from pectin solutions, a fact of importance in the classification of enzymes. In the course of some work started at this Station several years ago enzymes of different origin and type were tested for their action on pectin. Gels of stiff consistency were obtained by the use of some typical esterases. A preparation from castor beans was used in the first case. The beans were crushed, extracted with ether and dried. This crude preparation forms a gel from apple or lemon pectin in the presence of calcium ion at *PH* 5 and 8, but not at *PH* 3. A commercial lipase preparation (Difco, from pancreas) was also applied, with the same results.

The fact that from pectin gel could be formed by the use of typical ester-hydrolyzing enzymes verifies the earlier assumption about the esterase character of pectase. The more specific name pectin-demethoxylase is proposed for this enzyme.

(1) Von Euler, *Chemie der Enzyme*, Teil 2, Absch. 1, 457 (1928).

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Note on the Preparation of Dibenzoyl-*d*-tartaric Acid

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Considerable quantities of dibenzoyl-*d*-tartaric acid were needed for use in research on the cinchona alkaloids which is in progress in this Laboratory. The only detailed directions for the preparation of this substance which could be found in the literature were in a paper by Zetzsche and Hubacher.¹

(1) Zetzsche and Hubacher, *Helv. Chim. Acta*, **9**, 291 (1926).