colonne 2) en sa présence. Le rôle du calcium sur le complexe trypsine-ovomucoïde est ainsi double: d'une part il accélère considérablement l'inactivation de l'ovomucoïde, d'autre part il agit en protecteur de la trypsine libérée par cette inactivation.

Remarquons enfin que la trypsine, lorsqu'elle se trouve sous forme de complexe trypsine-ovomucoïde, est protégée contre l'action inactivante de la température de façon encore plus efficace que par le calcium lorsqu'elle est libre.

L'ensemble de ces résultats conduit à penser que l'ovomucoïde existe en solution sous une forme active et une forme inactive en équilibre; le calcium et la trypsine agissent tous deux sur cet équilibre, le premier en le déplaçant en faveur de la forme inactive, la deuxième en le détruisant parce qu'elle hydrolyse cette forme inactive. Une étude plus détaillée de cet équilibre sera publiée dans ce même journal.

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## ENZYMATIC HYDROLYSIS OF LINSEED MUCILAGE

by

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As far as we know an enzymatic hydrolysis of linseed mucilage has never been reported. After reading PIGMAN's review in SUMNER AND MYRBÄCK[1] it even looks as if an attempt was never made to prove the existence of enzymes attacking linseed mucilage.

We have now found that a commercial preparation of hemicellulase of fungal origin, brought on the market by the Paul Lewis Laboraties and by General Biochemicals, Inc., contains an enzyme which reduces the viscosity of solutions of linseed mucilage, accompanied by a production of reducing sugars.

The mucilage was obtained by the extraction of linseed with water and precipitation and re-precipitation with alcohol. 0.4 % solutions were made in appropriate buffer solutions and the declining viscosity was measured in a Höppler or an Ostwald viscometer. Controls were run with boiled solutions of the enzyme.

Reducing sugars were determined according to SUMNER AND SOMERS[2], pentoses according to MASSART AND HOSTE[3]. Paper chromatography was carried out with butanol as the solvent and aniline-oxalate as the detector.

Our main results can be summarized as follows:

1. the viscosity declines very rapidly during the first minutes, later more slowly but steadily without reaching the viscosity of water even after hours;

2. the amount of reducing groups set free grows rapidly at first, later more steadily;

3. paper chromatography reveals the existence of galactose and xylose after enzymatic hydrolysis;

4. the optimum pH of the enzymatic hydrolysis is 6; exposure to pH 2.1 for 30 min inactivates the enzyme;

5. above 40° C the rate of hydrolysis diminishes; exposure to 85° C for 30 min inactivates the enzyme;

6. the enzyme is precipitated by treating with ammonium sulphate 66.6 % sat.

These and other results together with a discussion will be submitted for publication in this journal.

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