

Thematic course: Physicochemical methods of activation of pectinolytic enzymes. Part 1.

Ion exchange on strong ionites

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Abstract

Application of strong ionites for purification and isolation of polygalacturonases does not lead to essential enzyme inactivation. High purification selectivity of the Pectofetidin G3x pectinolytic preparation solutions by the strong anionite Amberlite CG-400 was reached in weakly acidic medium as well as by the strong cationite Amberlite CG-120 in neutral medium. The treatment by strong cationites (Amberlite CG-120 and KU-2) at the pH value above 5.0 has increased polygalacturonases activation by 20-50%. Polygalacturonases isolation from enzyme solutions by the above-listed cationites in the weakly acid medium has led to the increase of total activity after desorption 1.25-1.50 times against the adsorbed activity.