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Thematic course: Physical and chemical methods for activation of pectinolytic enzymes. Part 4. Preparation of highly active polygalacturonases

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Abstract

The different approaches to developing methods for preparing of highly active enzyme preparations of polygalacturonases are discussed in this paper. The first approach involves the sequential removal of the individual groups of inactive impurities and obtaining on the last step the purified enzyme solution with high specific activity. It is shown that in this case the yield of total activity may be reduced to 40-50% of the initial value due to losses at each stage of processing. The second approach involves the selective isolation of the desired enzymes from the solution after activating them. Thus it is possible to achieve considerably high values of the specific activity of the enzymes and obtain a yield of total activity above its initial value by 20-30%.