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ReferencesChapter 3 -Cell-wall Polysaccharides of Potatoes; Introduction; Overall Polysaccharide Composition of Potato Cell Walls; Individual Polysaccharides; Cellulose; Pectic polysaccharides (pectins); Homogalacturonan (HG); Rhamnogalacturonan I (RG-I); Rhamnogalacturonan II (RG-II); Xylogalacturonan (XGA); Xyloglucans; Heteromannans; Heteroxylans; Genetic Manipulation of Cell-wall Polysaccharide Compositions; Molecular architecture of the cell walls; Cell-wall models; Immunolabeling studies of the location of polysaccharides; Effects of Heating on Cell-wall Polysaccharides; References
Further readingChapter 4 -Structure of Potato Starch; Introduction; Polysaccharide Components of Potato Starch; Starch Granules in Potato; Phosphorylated Potato Starch; Potato Starch Synthesis; Sugar activation and regulation of synthesis; Chain elongation; Branching and maturation de-branching; Starch phosphorylation; Conclusions; References; Chapter 5 -Potato Proteins, Lipids, and Minerals; Introduction; Proteins; The contribution of potato proteins to human diet; Overall protein composition - potato tuber proteome; Major proteins of potato tubers; Potential applications of potato proteins
Potato protein concentrates and isolatesSome suggested applications for protease inhibitors; Aspartic proteases; Potato protein hydrolysates; Safety aspects of potato proteins; Lipids; The contribution of potato lipids to human diet; The lipids in potato tubers; Simple lipids; Complex lipids; The effects of storage on potato tuber lipids; Lipids and potato flavor; Minerals; The contribution of potato minerals to human diets; The accumulation of mineral elements by potato tubers; Distribution of mineral elements within potato tubers; Varietal differences in tuber mineral composition
The effects of agronomy on tuber mineral composition

Sommario/riassunto

Developments in potato chemistry, including identification and use of the functional components of potatoes, genetic improvements and modifications that increase their suitability for food and non-food applications, the use of starch chemistry in non-food industry and methods of sensory and objective measurement have led to new and important uses for this crop. Advances in Potato Chemistry and Technology presents the most current information available in one convenient resource.The expert coverage includes details on findings related to potato composition, new methods of quality determi