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Underutilized Sources of Pectin as Edible Coating †

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Abstract: The use of natural and biodegradable materials is becoming a trend in the food processing and packaging industries to reduce environmental problems and minimize toxic waste production. The development of natural edible coating and thin films is a current interest of research among scientists. Pectin, a natural polysaccharide used in the development of edible films and coating, increases the shelf life of perishable food items. It protects the food from outer environment thereby delaying loss of nutrition, and maintaining physical and chemical properties for a longer duration. Pectin is commercially produced from Apple and Citrus fruits because of its phenomenal quality of gelling. However, many other fruits and vegetables also contain a good amount of pectin, but pectin has structure variation, making it versatile for a wide range of applications. The Indigenous minor fruits and vegetables also serve as a good source of pectin, which may differ in structural and gelling property from commercial pectin but may have the ability to use in making the edible coating. The development of edible thin film and coating from underutilized sources of pectin increases the demand and cultivation of these sources on an industrial level, which are limited to local and small-scale industries. The present review focuses on different types of underutilized sources of pectin to develop natural edible thin films and coatings.

Keywords: pectin; edible coating; underutilized fruits.

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Conflicts of Interest

The authors declare no conflict of interest.