Application of shellac as a coating material in shelf life enhancement of grapes

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Rising pressure in food preservation sector to replace chemical applications has urged researchers to focus on studying new strategies of extending the post-harvest life of produces. Grapes are a good source of potassium with a calorific value of 60 calorie and less than 1 gram of fat out of 100 gm. Shellac has GRAS status by the Food and Drug Administration (FDA) which means that it is generally recognized as safe in foods. If used as a fruit or vegetable coating, it may be labeled as lac resin or as shellac. The objectives of this study were to extend the shelf life of grapes (Anab-e-shahi) by applying edible coating of shellac and investigate the effect of different temperature and different concentration of shellac coating on shelf life of grapes. There were 5 different treatment of shellac coating applied on grapes and stored at room temperature (30ºC) and refrigeration temperature (5ºC) for 7 days. From investigation S3 coating (12% shellac + 2% oleic acid + 4.4% morpholine + 0.3% ammonia) proved to be best according to sensory, physical and chemical test. It gives better shelf life and consumer acceptability on room temperature as well as refrigeration temperature.

Biography
Neha Yadav is currently pursuing her PhD in Food Technology with specialisation in canning. She has completed her BTech, MTech in Food Engineering and MBA in International Business. She is a motivational career counselor, food safety consultant and has more than three years of work experience in academics and industry. She has hosted and participated in more than 20 national and international conferences and workshops. Her area of specialisation is Food safety and food packaging. Her willingness is to work in area of advance food packaging during post doctorate in future.

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