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**Research article****Postharvest Quality of 'Carabao' Mango as Affected by Spun-Bound Bagging Materials**

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**Abstract** A safe option to address some production problems such as insect damage, diseases, and blemishes in mango is fruit bagging. 'Carabao' mango fruit at 55 days after flower induction (DAFI) were bagged with three bagging materials: old newspaper (control), spun-bound high density polyethylene (SHDPE, DuPont™ Tyvek® Homewrap, 0.15 mm thick) and non-woven spun-bound polypropylene (NSPP, 0.03mm thick). Bagged mango fruit were harvested at 118 DAFI. At harvest, NSPP bagging material resulted in better quality of fruit compared to newspaper and SHDPE. Advanced color change was observed both in newspaper and SHDPE at 4 and 8 days after harvest (DAH). Compared to newspaper and SHDPE, slower color change was observed in fruit bagged with NSPP up to 8 DAH. The degree of anthracnose infection did not differ among bagging materials. Higher degree of stem end rot (SER) infection was noted in newspaper at table ripe stage (TRS). Onset of SER was delayed by about a day in NSPP and SHDPE. At 8 DAH, lowest weight loss was observed in mango bagged with newspaper. Slightly longer shelf life of about a day (0.72 d) was noted in NSPP-bagged fruit. Shelf life was reduced in newspaper which may be attributed to fruit reaching TRS faster by a day and earlier onset of SER. Total soluble solids in fruit bagged with SHDPE was lower upon harvest and during storage at 8 days while firmness did not vary among bagging materials. NSPP showed potential as bagging material that can maintain better quality of 'Carabao' mango fruit.

**Keywords:** Bagging, Mango, Non-woven spun bound polypropylene, Preharvest, stem end rot

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