

P173

Curing period affect the occurrence of black dot, weight loss and sprouting of potato tubers during storage

Dong Chil Chang^{1*}, Yong Ik Jin, Sam Nyu Jee, Jung Hwan Nam, Dong Lim Yoo, Chung Gi Cheon, Jong Keun Choi, Su Jeong Kim, and Hong-Seob Yu

¹Highland Agriculture Research Institute, National Institute of Crop Science, Pyeongchang 25342, Korea

Abstract

A potato cultivar, Haryeong, was released for table stock in 2005 and has been supplied to farmers since 2010. Black dot has been known as a disease causing tuber blemishes in the cultivar, which is primarily an issue in storage. To investigate the effect of curing periods on disease occurrence, four periods (1, 3, 6 and 9 weeks) of curing were applied on Haryeong tubers harvested from the highlands (800 m a.s.l) in September. Tubers were stored at 2-3°C and 80-90% RH for 6-7 months and were visually checked for disease occurrence. Tuber infection was characterized by barely visible small black spots on tubers and dark sooty lesions in stolon end of tubers. Another symptoms were observed on the upper surface of tubers which showed irregular, small to large, and depressed areas of brown to blackish skin with necrotic lesions inside. Results showed decrease in black dot depending on the curing period that ranges 18-48, 3-35, 0-14 and 0-3% at 1, 3, 6 and 9 weeks curing, respectively. During the storage, however, percentage weight loss of tubers and percentage of tubers with sprouts increased slightly with increasing the curing period from 1-3 to 6-9 weeks.

Key words Curing period · *Colletotrichum coccodes* · Storage