

**Title** Exocarp development related to fruit skin disorders in “Niitaka” pear fruit  
**Author** HeeSeung Park, Seung-Koo Lee, and Yoonpyo Hong  
**Citation** Abstracts of 27th International Horticultural Congress & Exhibition (IHC 2006), August 13-19, 2006, COEX (Convention & Exhibition), Seoul, Korea. 494 pages.  
**Keywords** pear; skin disorder

#### **Abstract**

Photomicrography made clear the morphology of there distinct skin layers in “Niitaka” pear fruit including cork, cork cambium, and hypodermis at harvest time. The skin layers of black stained fruit was 10  $\mu\text{m}$  thicker than those of sound fruit. The thicker layers of black stained fruit might result from the formation of two-or there cork layers. On the other hand, the skin layers of skin blackened fruit was about 100  $\mu\text{m}$  thinner than those of sound one. The thinner layers of skin blackenied fruit resulted from collapse of the hypodermal layer. Peeling-off fruit had a decorking layer between cork layer and cork cambium layer and cork cambium layer, which was resulted from the cell elongation, whereas black stain fruit was caused by the increased cork layers and skin blackening was made by the collapsed hypodermis. These results suggested that the three types of skin disorders developed in different parts of fruit skin layers.