Physiological diseases of orchards productions

M. Behroozin

Plant Pests and Diseases Research Institute, Tehran.

Physiological diseases or physiological disorders are not parasitic and are caused by several factors such as weather condition and nutritions. The most of these disorders which produce damage are kinds of scald, biterpit and water core.

Biterpit: this is one of the most important disorders of apples and pears. Most of cultivars are susceptible. Bitterpit is sometimes discernible in apples on tree but usually develop only after harvest. The calyx end of the fruit to be affected first. Pits are hard, sumken and discolours.

Scald: storage scald affects mainly the skin of the fruit. The disorder is thought caused by oxidation of products. After several months of storage, the disorder may appear as a diffuse browning of skin, some what roughened in severe cases. The scald lesion is often confined to the unblushed areas of the skin. Most of cultivars are sensetive scald. Water core: It is a preharvest disorder of apples. Symptoms develop before harvest and can be observed if affected fruits are cut. Translucent or glassy areas of tissue are present sometimes in the core region and sometimes located around the vascular bundles.