Influence of ethephon on harvesting facility of seedless barberry

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Barberry is a valuable shrub that use from its different organs are used for various purposes. Recently, areas and production of seedless barberry in Southern Khorasan have increased considerably.

Harvesting barberry fruit is very difficult and costly because of high density of branches and plenty of thorns.

Moreover, traditional methods of harvest damages abundantly to vegetative and reproductive organs of the shrub and increases product loss.

A three year study in Mashad, Gonabad and Ghaen was conducted. Ethephon was sprayed with concentrations 400 to 1000 ppm.

The results of ethephon application showed that all of concentrations increased significantly the rare of berry loosening, three weeks after spray. The most suitable rate of ethepon was 800 ppm. Differences among ethepon effects in three locations is probably due to climate variations.

Ethepon at concentrations of 600, 700 and 800 ppm significantly increased total soluble solids but had no significant effects on acidity or pH. Ethepon delayed bud break in the following spring as well.