THE EFFECT OF HARVEST DATE ON TUBER YIELD AND QUALITY CHARACTERISTICS OF SOME PROCESSING POTATO CULTIVARS UNDER THE MEDITERRANEAN CONDITIONS

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ABSTRACT

This study was carried out to determine the effect of harvest dates on tuber yield, yield components and some important quality characteristics of some processing type potato cultivars during the winter and spring seasons of 2003 and 2004 at Adana, located in the East Mediterranean region of Turkey. Six processing potato cultivars (Felsina, Shepody, Hermes, Remarka, Agria and Van Gogh) planted on 19th January in 2003 and 27th February in 2004 were harvested at three different dates as representing early (15th May), normal (24th May) and late harvest time (9th June) for the region. Tuber yield and yield components increased significantly as harvest was delayed in all cultivars. Cultivar differences for tuber yield were more pronounced at earlier harvest, but it disappeared at the last harvest at which all cultivars with over 45 t/ha tuber yield. Delaying harvest until late May positively affected dry matter, starch and reducing sugar content in all cultivars, but further delaying of harvest resulted in a decrease in tuber quality of some cultivars. These results indicated that off-season early potato crops of Mediterranean region have acceptable processing quality depending on cultivars and harvest dates.

Key Words: Early potato, cultivar, processing quality, harvest time, Mediterranean region