

Abstract:

It is well-known that Citrus have many healthful properties. Among the Citrus constituents, flavonoids are very important secondary metabolites with anticancer, antiviral and anti-inflammatory activities due to their antioxidant and antimutagenic activities. Although there are some evidences of the effects of rootstock and of environment on secondary metabolite production in Citrus, flavonoid contents in fruits mainly depend on genetic characteristics. The knowledge of this characteristic could be interesting in view of alternative commercial employments of Citrus as source of phytochemicals for pharmaceutical and industrial purposes. The present study has been carried out to investigate the flavonoid content of fruits of sixteen genotypes of Citrus (clones of Citrus clementina Hort. ex Tan., Citrus reticulata Blanco, Citrus sinensis (L.) Osbeck, Citrus aurantium L., *Citrus limon* Burm. f. and Citrus paradisi Macf.), collected at different ripening stages. The flavonoid content have been analysed and compared also separately in peel and flesh of fruits harvested in November.

Flavonoid contents have been determined by HPLC analyses.