

QUANTITATIVE ANALYSIS OF PROANTHOCYANIDINS (TANNINS) FROM GRAPE (*VITIS VINIFERA*) SEEDS BY REVERSE PHASE HIGH-PERFORMANCE LIQUID CHROMATOGRAPHY

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ABSTRACT

Proanthocyanidins(PAs) are oligomeric and polymeric end products of the flavonoid biosynthetic pathway. They are present in the fruits, bark, leaves and seeds of many plants, where they provide protection against predation. At the same time they give flavor and astringency to beverages such as wine, fruit juices and teas, and are increasingly recognized as having a health promoting on human health. Seed extracts from five grape cultivars (*Vitis vinifera*) growing in El-Tarf (Algeria), were screened for their PAs composition and mDP (mean degree of polymerization). **The study was realized** by means of reversed-phase high-performance liquid chromatography coupled with photodiode array detector (RP-HPLC-DAD) analysis after thiolysis. The study revealed the presence of seven phenolic compounds belonging to the class of flavan-3-ol; Qualitative and quantitative differences among the cultivars were observed. The results confirm that **grape seed of varieties studied are a potential source of PAs and can be used as easily accessible source of natural antioxidants.**