

# **Impact of climate on water stress in the vegetative development of the cultivated table vine of *Vitis vinifera* ssp *sativa* in Algeria.**

**Kaddour EL HEIT<sup>1</sup>, Abderrahmane MELLAK<sup>2</sup> and Abderazak HAMAMA<sup>3</sup>**

- Author<sup>1</sup>: Professor, Laboratory of Natural Resources: Viticulture / Arboriculture. Faculty of Biological Sciences and Agronomic Sciences. University Mouloud Mammeri.TiziOuzou. 15,000., Algeria

- Author<sup>2</sup>: Professor, Laboratoire : LGPH .F,H,C. University Mohamed Bougara ,Boumerdes 35000., Algeria

- Author<sup>3</sup> : PhD, Assistant Research , Laboratories of Natural Resources: Viticulture / Arboriculture , Faculty of Biological Sciences and Agronomic Sciences. University Mouloud Mammeri.TiziOuzou. 15,000., Algeria

- **Author for correspondence : EL-HEIT, K.: Mobile, (+213) 772 622 336 /561 283 181  
Email: [kaddy60023@yahoo.fr](mailto:kaddy60023@yahoo.fr)**

## **Abstract**

Several vine researchers have pointed out the negative role of water shortage on vegetative development and irretrievably on the quality of vegetable development eaten in fresh and also on wine products and by-products.

This phenomenon of water shortage is irretrievably associated with a water stress during the recovery of the vegetative cycle and the reproductive cycle is really impacted by the water deficit observed during the previous decades.

Our work on this subject is in concordance and corroborates with those published by many authors.

The results confirm that a water deficit seriously impacts the phloemian load which affects the anthocyaninic loading of grape berries, clearly visible on black and red grape varieties, on the sugar level, the acidity of the berries and the premature cessation of growth of the fertile branches and clusters compared to non-stressed vines

**Keywords:** impact, climate, water stress, vegetative development, wine products and by-products.