# **Titre d’article**: quality attributes of local and imported honeys commercialized in algeria

**Abstract :**

This study was aimed to assess quality, authentication parameters and trolox equivalent antioxidant capacity (TEAC) of Algerian and imported honeys sold in Algerian markets. Results indicated that 80% Algerian samples fulfilled international standards, whereas only 21.4% imported honeys were in agreement with the current regulations. 13.3% Algerian samples and 7.1% imported honeys showed values of proline lower than 180 mg/kg, which is the recommended limit for authentic honeys. Comparing Algerian and imported honeys, electrical conductivity, degrees Brix, diastase activities and proline contents were higher in Algerian honeys, in contrast to moisture percentages, hydroxymethylfurfural contents and acid phospatase activities that were higher in imported honeys. Methanolic extracts of Algerian samples were richer both in total phenolics and flavonoids determined in alkaline medium. There were not significant differences between Algerian and imported samples concerning pH, free acid, invertase, total carotenoid, total phenolics of raw honeys and TEAC, as well as regarding total flavonoids determined in neutral medium and o-diphenols of honeys’ methanolic extracts. Principal components analysis showed a good separation between Algerian and imported samples, only one multifloral Algerian honey being misclassified. Our research showed that a legal frame for Algerian honeys is of utmost importance. Spurge-labeled honeys were grouped, showing interesting common features that should be taken into account in a future regulation, in which a protected designation of origin for spurge honeys could be considered.