# **Titre d’article**: characterization of honeys from algeria according to climatic origin based on physicochemical properties.

**Abstract :**

Description of the subject: Honey is studied in different countries and regions because of the interest of consumers in its benefits for health, natural origin, and quality; this quality is linked with floral and geographic origin which is associate with climatic conditions. We focused on this aspect to assess quality of Algerian honey. Objective: The aim of the present study was to characterize the honey collected in the different regions all along the North of Algeria with humid, subhumid, arid and semi-arid climate, in order to determine the existing correlations between abiotic factors including hydroxymethylfrufural (HMF) linked to the quality of honey and climate effect. Methods: Six standard physico-chemical parameters were determined according to the international legislation (Electrical conductivity, moisture, Brix degree, pH, free acidity and HMF). Results: The results obtained were in agreement with international regulations for 89% of samples. Then, results were analyzed by principal component analysis applying forward selection. The analysis allowed us to show climatic origin impact on quality of honey samples analysed. Conclusion: Algerian beekeepers and authorities will have to work for the labeling of honeys, starting possibly by that of the arid regions of Ain oussara and Djelfa, according to a geographical controlled appellation of origin, the climate of these regions allows having a honey with low moisture content and therefore more stable and keeps its organoleptic properties longer.