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# CERTIFICATE OF PARTICIPATION

Awarded To

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**Importance of aromatic plants in diversifying honey production under arid conditions in the daïra of Boussaâda, wilaya of Msila - Algeria.**

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**Dr. Hanen NAJJAA**



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**Importance of aromatic plants in diversifying honey production under arid conditions in the daïra of Boussaâda, wilaya of Msila - Algeria.**

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**Abstract**

Our study, carried out in the daïra of Boussaâda, located 69 km south-west of the capital of the wilaya of Msila, with coordinates 35° 12' 30"North, 4° 10' 26"East, at an altitude of 470 m, aims to explore the diversity of aromatic plants among the twenty (20) beekeepers surveyed during our work, evaluating their relationship with the types of honey produced.

The Rhamnaceae and Zygophyllaceae families are the most dominant, with *Zizyphus jujuba* and *Peganum harmala* respectively, followed by the Lamiaceae (*Mentha sp.*) and Apiaceae (*Foeniculum vulgare*, *Coriandrum sativum*, *Petroselinum crispum*) families, and the Oleaceae and Rosaceae represented by *Olea europea*, *Malus pumila*, *Prunus domestica* and *pyrus comunis*.

The types of honey produced are generally dominated by *Zizyphus*, flower and Harmala honey, with rates of 35%, 26% and 18% respectively for all the beekeepers visited. *Zizyphus* based honey is the most widely consumed and the most in demand by consumers, followed by flower-based honey and, finally, honey produced in a predominantly Harmala environment, which is generally used for health care.

**Keywords:** Boussaâda; aromatic; beekeepers; Lamiaceae; Harmala; *Mentha sp.*

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**Effect of drying process on kinetic drying and diffusion coefficient of  
*Opuntia dillenii* Fruit (ODF)**

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**Abstract**

The *Opuntia dillenii* Fruit powder, known for their mild flavor and rich bioactive compounds. The present study investigated the influence of microwave drying (100–450 W) and oven temperature (40–70°C) on the color, phenolics profile and radical scavenging activity of garlic