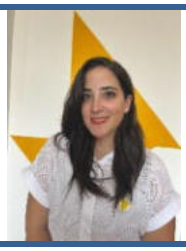
Università degli Studi di Palermo

DOTTORATO DI RICERCA IN
SISTEMI AGRO-ALIMENTARI E FORESTALI
MEDITERRANEI – XLI Ciclo

SAAF
DIPARTIMENTO SCIENZE AGRARIE ALIMENTARI FORESTALI

Curriculum Vitae

Family name	Zhioua
Given name	Khedija
Date of birth	22 August 2001
Citizenship	Italian–Tunisian
Email address	khedija.zhioua@unipa.it



Qualifications

2022-2025: Master's Degree in Hydraulics and Rural Development Engineering, National Agronomic Institute of Tunisia (INAT)
2020-2022: Bachelor's Degree in Preparatory studies in Biology and Geology, Higher Institute for Preparatory Studies in Biology and Geology (ISEP), La Soukra, Tunisia

ORCID https://orcid.org/0009-0007-5414-982X

Location

Department of Agricultural, Food, and Forest Sciences (SAAF), Viale delle Scienze, Palermo, Ed.4, Ingresso E, piano terra, stanza 009 (ED.4.E.PT-34)

Studies abroad

Research interests

- Determination and characterization of soil hydrodynamic parameters (e.g. saturated and unsaturated hydraulic conductivity, water retention properties)
- Experimental investigation of Darcy's law applicability under different soil conditions
- Effects of soil compaction and structure on water flow and hydraulic behavior
- Laboratory methodologies for measuring saturated hydraulic conductivity (Ks)
- Comparison of different experimental approaches (e.g. constant head permeameter, SFH methods)
- Soil–water interactions in Mediterranean agro-ecosystems

Expertise

- GIS-based spatial analysis for water resources
- Soil physics and soil hydraulics
- Measurement of hydraulic conductivity
- Hydrological modeling

Language skills

Arabic – Native
French – Fluent
English – Fluent
Italian – Intermediate

IT skills

HYDRUS 2D/3D, EPANET, WEAP
QGIS, ArcGIS
Python, R
Microsoft Office

Awards and scholarships

Publications

Autovino, D., Bagarello, V., Bondì, C., Russo, G., Zanna, F., & Zhioua, K. (2026). Hydrodynamic behavior of a near-saturated sandy-loam soil shortly after incorporating compost or zeolite. Soil and Tillage Research, 258, 107035.

Link to publications (IRIS database) https://iris.unipa.it/cris/rp/rp170517