

This PhD program is for **Self-Funded PhD Students Only**

International tuition fees for 2025-26 entry – 4.800 € per annum

Title: Quality parameters of mechanically extracted edible oils and oil cakes from wild fruit seeds as potential functional foods

So far, the seeds of most plant species are characterized and known. However, there is an interesting and insufficiently researched category, namely the seeds of wild fruits, especially on the territory of Serbia. The focus of this research is on wild fruits of the genera Prunus, Sambucus, Crataegus, Hippophae, Lonicera, Rosa, Rubus, Fragaria and Vaccinium.

The research would include collecting wild fruits, which would also mean a special adventure and acquaintance with the natural beauties of Serbia.

The continuation of the research would take place in the laboratory and would include the preparation of seeds for oil extraction by cold pressing, the study of physico-chemical properties of the extracted oils and oil cakes, the determination of nutritional indices, oxidative stability and in vitro digestibility of the oils.

In further research, the extracted oils and oil cakes would be used as functional additives in selected baked goods and confectionery.

Supervisors:

Supervisor 1: prof. Dr Biljana Rabrenović: e-mail: biljanar@agrif.bg.ac.rs

Supervisor 2: prof. Dr Milica Fotirić-Akšić: e-mail: fotiric@agrif.bg.ac.rs

Entry requirements: educational background (both bachelor's and master's degree) in food science, food technology, biochemistry, agronomy or similar, as well as some IT background. Applicants must meet the minimum English language requirements.

All potential applicants should send a CV highlighting educational background. In parallel, applicants may send a short research proposal (up to 3,000 words including references) to both supervisors. Upon selection of potential candidates, they will be contacted by the supervisors for an online interview, prior to selecting one PhD candidate.