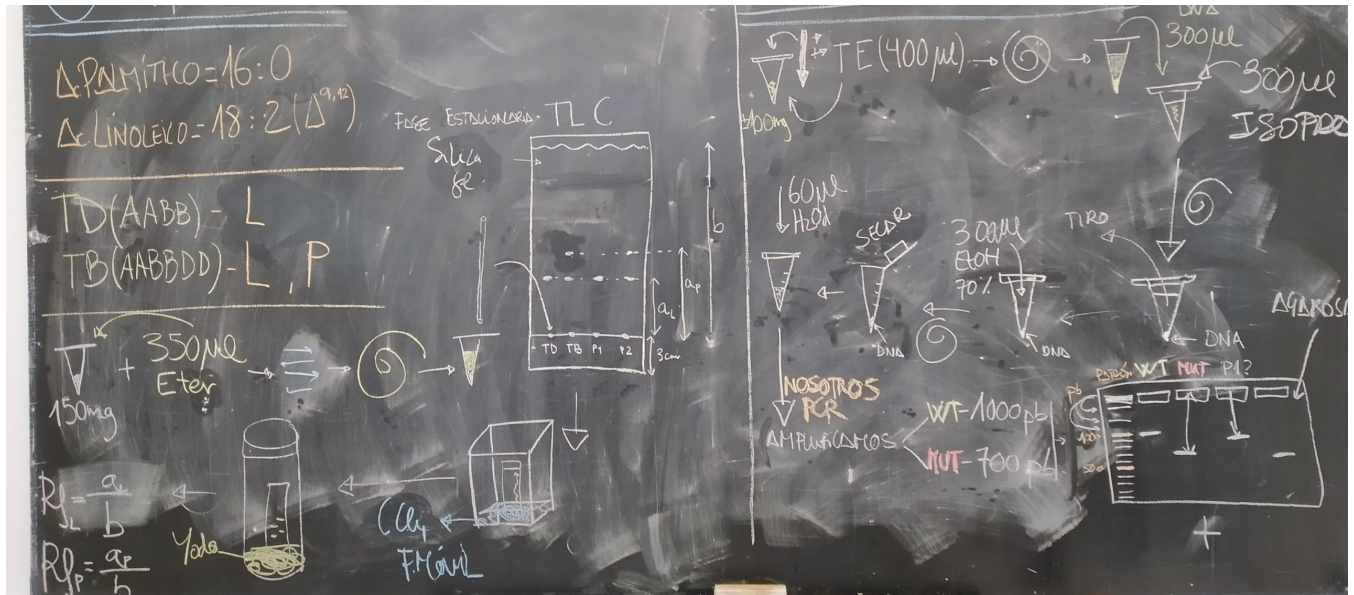


# Biomolecular analysis

Biochemical analysis of Biomolecules: Protein, nucleic acid (RNA and DNA), nutrients in food and plant cell wall (cellulose, hemicellulose and pectins) extraction and quantification.



## Contact information

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## Technological Offers type

Technological scientific services

## Research and innovation areas

- Agriculture, Forestry, Natural Resources, Land Use and Blue Growth
- Bioeconomy, Biotechnology and Food Systems
- Health and Wellbeing

## ODS



**Available from:** 2021

## **Where?**

[Biodiversity and conservation of plant genetic resources](#)

Keywords: | [analysis](#) | [biochemical](#) | [cell-wall-plants](#) | [foods](#) | [nutrients](#)

## **Biomolecular Analysis**

### **Extraction and quantification of biomolecules in food and plants**

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#### **Description of the services offered**

Biomolecules are extracted and purified. The final product is delivered, diluted and lyophilised.

Biochemical analysis (spectrophotometric, electrophoretic and chromatographic) of **nutrients** in food, mainly plants. Phenolic compounds, antioxidants, total sugars and proteins can be analysed, amongst others. The final results are delivered in a report with graphic representations and statistical analysis. All analyses include a preliminary experiment design to ensure the representativeness and amounts of substrates needed to do all the analyses.

Extraction and purification of biomolecules using biochemical methods adapted to the study matrix. Column-based DNA and RNA extraction and purification.

#### **Needs requested and applications**

Food biochemical analysis. Phytochemical extraction and quantification. Biomolecule extraction and quantification.

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#### **Sector or area of application**

Food, agriculture and biomolecular research industry.

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#### **Differential skills**

Adaptation of the analyses to the study matrix.

#### **Previous references for provision of services**

FYTEKO SL

Equipment description

HTSEAAB Biotechnology Department – Plant Biology. Laboratory located in the Biochemistry area. It has all the necessary equipment, such as incubators, homogenisers, refrigerated centrifuges, protein and nucleic acid electrophoresis system, plate reader, cuvette and nanodrop spectrophotometer, lyophiliser, TLC chromatography cuvettes, molecular exclusion chromatography and freezers

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#### **Request for service**

Via e-mail.

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