



## “Plant Metabolomics Challenges Workshop in Seville”

The workshop “[Challenges in Plant Metabolomics](#)” took place at the CEU University in Seville on the 3<sup>rd</sup> of June 2024. A total of 24 participants from Research Institutions and Companies participated in the workshop that was organized by Harnesstom Coordinator Antonio Granell and included presentations from eight leading plant metabolomics groups in Spain.

Plants excel over other organisms by the increased variety of small molecules they produce. These molecules are part of plant responses and adaptation mechanisms to changing environmental conditions from which they cannot escape given their sessile way of life or developed as an adaptation to the interaction with other organisms. Many plants or their parts are used as food or feed and many small molecules contribute to the nutritional and organoleptic value. By leading the organization of this Workshop, [Harnesstom](#) emphasizes its interest in small molecules as they play important roles in tomato fruit quality and in the responses to both biotic and abiotic stress all of them central in Harnesstom research program. During the workshop special attention was given to the specific aspects plant metabolomics need special developments and include identification, isomer separation, quantification. It was also a good opportunity to start building a community of Spanish groups interested in plant metabolomics. Attracting a higher number of Spanish groups working on plant metabolomics is key to improve the level of interaction among plant experts and also with other members of the SESMET.

The program of the workshop "Challenges in Plant Metabolomics" was as follows:

**Program: Monday June 3<sup>rd</sup> from 10:00 to 13:30 CEU, Seville**

1. **“Introduction to the Workshop”** by **Antonio Granell**. [Harnesstom](#) Coordinator and SESMET secretary and founder. IBMCP (CSIC-UPV)
2. **“Cuantificación de hormonas vegetales UPLC-MS Orbitrap”** presented by **Ester Carrera** del Servicio Cuantificación de Hormonas Vegetales, IBMCP, Valencia.
3. **“Metabolismo especializado de plantas en respuesta a estreses medioambientales UPLC MS”** presentado por **Vicente Arbona** del [Departament de Biologia, Bioquímica i Ciències Naturals](#), UJI, Castelló.
4. **“Metabolismo primario /especializado por derivatización y GCMS”**. Presentado por **Sonia Osorio** del Departamento Biología Molecular y Bioquímica, UMA, Málaga.
5. **“Volatiloma de plantas”** presentado por **Ana Espinosa** del Servicio Metabolómica, IBMCP, Valencia.
6. **“Metabolómica en alimentos”** presentado por **Rocío García-Villalba** del CEBAS
7. **“Metabolismo especializado en sistemas celulares de plantas”** presentado por **María Ángeles Pedreño** de la Universidad de Murcia.
8. **“Metabolómica para averiguar el modo de acción de los bio-herbicidas y los mecanismos de resiliencia y plasticidad de las plantas”** presentado por **Adela Sánchez Moreiras** del grupo de Agrobiología: calidad de suelos y plantas de la Universidad de Vigo





Participants of the Workshop on “Challenges in Plant Metabolomics” that took place at the CEU in Seville, Spain on the 3<sup>rd</sup> of June 2024.