

European Plant Science Organisation

Activities' Report - Year 2023

Aldo Ceriotti/Angelo Santino

1. Introduction

The [European Plant Science Organisation](#) (EPSO) is an association based in Brussels (Belgium) which represent more than 200 research centers, departments and universities from 31 different countries, with the goal of fostering plant science in Europe and providing independent information concerning the plant research sector.

2. Main activities carried on by (Union name) during 2023 relevant for Italy and for CNR

EPSO's first priority is to develop longer term science strategies and provide science advice to policy – science policy as well as policy related to agricultural technologies. Both science policy as well as policy related to agricultural technologies are at the focus of EPSO's activities. Horizon Europe, the European Green Deal (Farm to Fork; Biodiversity) and the regulation of New Breeding Technologies have been at the center of several EPSO activities in 2023. EPSO and its members engaged with the European Commission (EC), some Directorates and with Member States and National Ministries in different occasions, such as EPSO Board meeting, ERA-networks and EPSO informal science and policy meetings. EPSO's General Director is elected member of the [Initiative for Science in Europe \(ISE\)](#) Executive Committee. In 2023, EPSO was appointed as member of the [EU Forest and Forestry Stakeholder Platform](#).

EPSO is also founding member of the [Plants for the Future European Technology Platform](#) (Plant ETP).

EPSO is bringing forward the following concepts:

- 1) Addressing 'Environmental Sustainability' jointly with 'Food and Nutritional Security' and with 'Human Health'
- 2) Fostering this through improving crops towards 'Diverse crops for diverse diets and human health and or resilient production'
- 3) Encouraging comprehensive contributions through 'combining crop improvement with better crop management and processing'
- 4) Defining the goals but leaving the pathways to achieve these open to truly support innovation and not restrict the approaches and thereby the impact.

Within Horizon Europe, EPSO proposes to strengthen the links between the health cluster (1) with the food, agriculture, biotechnology cluster (6) to truly enable plant biologists, breeders, processors, nutritional scientist and health experts to develop interdisciplinary research to improve nutritional compounds in plants for the human diet. The development of molecular farming for in planta production of pharmaceuticals is another area where cluster 1 and 6 may converge.

Since 2019 EPSO promotes informal science and policy meetings involving representatives from National Ministries. These focus is on how the current legislation on New Breeding Technologies (NBT) could be improved and how flagship projects could be supported to develop in Europe NBT products with benefits for both consumers and the environment.

3. Activities carried on by Aldo Ceriotti and Angelo Santino within the Union during 2023 and impact on the Italian scientific community

In 2023 two meetings of the Board of Directors (04/04/2023; 07/12-/023) and seven meetings of the Executive committee (03-02, 08-03, 04-05, 12-06, 29-08, 29-09, 05-10) were held online, at which the CNR substitute Angelo Santino participated as board member and EPSO Vice-President. The CNR delegates participated also in the EPSO Regional Meeting held online on 15/04/2023.

The CNR representatives (delegate and substitute) participated in the General Meeting, which was held in Dusseldorf on 28-30 June 2023. The first part of the General Meeting included the election of Board Members, the report from the General Director, administrative issues, discussion on science policies and on EPSO's initiatives to support EPSO members (Working groups, Plant Science Seminars, Young Plant Scientist Award call 2024, open access policies).

The second part was devoted to the scientific talks presented by scientists from EPSO Members.

The CNR delegate Aldo Ceriotti attended the meetings of the Working Group "[Agricultural Technologies](#)" which were held on-line on 26/04/023, 11/09/2023 and 27/11/2023. The Working Group addressed issues related to the regulation of genome editing in Europe and the implementation of the Nagoya protocol, which imposes tight restrictions to the international exchange of genetic material. The Working Group contributed to the publication of the EPSO [first reaction](#) and [statement](#) on the European Commission's legal proposal for a Regulation of the European Parliament and of the Council on plants obtained by certain NGTs and their food and feed, and of the [report](#) Genome editing - Improving legislation and starting flagships to better address climate, environmental, food and health challenges.

As co-chair of the Working Group "[Nutritional Security](#)", the CNR substitute Angelo Santino organized the 4th workshop online on 4.12.2023 and contributed to the publication of the WG first statement entitled: "Contributions from plant science towards Nutritional Security and human health". The scope of the Working Group is the development of a comprehensive strategy to ensure a better nutritional security to European citizens. These topics were also included in a seminar organized on October 19 by the NS WG within the EPSO Science Seminars 2023.

The active participation to the meetings of the Board of Directors, the General Meeting and the meetings of the Working Groups guaranteed a continuous flow of information on several issues relevant for the scientific community including the strategic programming in Europe. All these activities increased the visibility of CNR and the Italian plant science community at European level.

4. Evaluation of the participation in terms of benefits and membership cost

The EPSO membership allows the involvement in a constant discussion forum on the strategic development of European plant science and of the agricultural research sector, also providing opportunities to bring these issues to the attention of the European Commission. EPSO regularly informs members about upcoming events and publishes a newsletter distributed through the EPSO website. The Annual General Meeting is also an important opportunity to discuss strategies to foster plant science in Europe. Overall EPSO provides a useful discussion forum for European Institutions in the plant science domain, and promotes the participation to international networks which can further converge into research partnerships and joint projects.

EPSO Membership allows CNR to contribute to science policy discussions at the European level by giving inputs to the drafting of EPSO's submissions to EC consultations, EPSO Statements, and participate in science policy meetings organized by EPSO. Through EPSO, CNR can bring issues at the attention European Research Area Networks, ISE and Plant ETP meetings, thus contributing to the discussion of several topics relevant for plant science and agriculture.

EPSO provides support to plant science and plant scientists, mainly with the EPSO Working Groups and the monthly online Plant Science Seminar series, the Young Plant Scientist Award (YPSA), and through briefings on plant science funding opportunities. In 2023 EPSO published briefing on the WAVE, Horizon Europe, and LIFE

programs. The EPSO website presents EPSO's tailored information for plant scientists at the Members only section. The EPSO Newsletters is released as a short public version, while the full version is available on the Members Only Website.

EPSO can be involved as a partner in EU funded projects where it can play a role in developing stakeholder groups, policy briefs and working on dissemination, to increase the final impact of the project.

In 2012 EPSO initiated the "[Fascination of Plants Day](#)" (FoPD) an international outreach activity devoted to plant science. The 2022 FoPD was held in over 54 countries across the globe and generated over 800 interactive events attracting thousands of participants. CNR, in the person of Valeria Bianciotto (CNR Institute for Sustainable Plant Protection) coordinates, together with University of Turin, the organization of the event in Italy. The next FoPD edition will be held in 2024.

5. Evaluation of Italians' attendance and how to improve interest and involvement

Six other Italian institutions, in addition to CNR, are currently members of EPSO: University of Milan, University of Bologna, University of Turin, University of Udine, University of Padova, Università Politecnica delle Marche.

CNR scientists participated to EPSO activities by contributing to the group of "EPSO Supporting Scientists", with scientific expertise spanning the main areas of plant biology. Currently, the group of Supporting Scientists involves eight researchers from two Departments.

EPSO Membership allows CNR scientists to participate in EPSO [Working Groups](#), which represent a very useful discussion forum on issues of high relevance for plant science. The activities of the Working Groups include the organization of workshops and the publications of documents presenting EPSO position and proposals for the development of plant science at the international level. Several CNR scientists are currently involved in the activity of different Working Groups (Agricultural Technologies, Nutritional Security, Plant Health, Plants and Microbiomes, Horticulture), with CNR researchers serving as co-chairs of some strategic working groups (Nutritional Security, Plant Health, Horticulture).

6. Italian experts with important roles within the Union or within related Commissions and Programs (if known)

The General Meeting held online in July 2021 confirmed the CNR substitute Angelo as member of the Board of Directors, whose three-year term started on 1st December 2021. As Board member, Angelo Santino participated in the meetings of the Board of Directors carried out in 2023. In 2022, Angelo Santino was nominated EPSO vice-President.

7. Conclusions

EPSO is the main association promoting plant science and agricultural research in Europe, and plays an important role as scientific advisor on European research policies. Thanks to the EPSO membership, CNR representatives are part of a European level discussion forum, thus contributing to the development of the European research strategies. The EPSO membership significantly contributes to the internationalization of CNR activities, improves the visibility and impact of CNR in Europe, and creates further opportunities to participate in international research consortia.

Milan, 24/07/2024

Aldo Ceriotti



Angelo Santino

