

# European Plant Science Organisation

## Annual Report - Year 2019

**Aldo Ceriotti**  
**Angelo Santino**

### 1. Introduction

The European Plant Science Organisation (EPSO, <http://www.epsoweb.org>) 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 EPSO during 2019 relevant for Italy and for CNR

In 2019 EPSO carried on several actions of relevance for European research policies, in order to:

- Highlight the importance of plant research;
- Promote the interaction among the clusters within the Horizon Europe program. For instance, an interaction between the Cluster 6 (Food, bioeconomy, Natural Resources, Agriculture and Environment) and Cluster 1 (Human Health) has been proposed to stress the connection between nutrition and health;
- Create an integrated network within each cluster (i.e. topics related to food sustainable productions and those connected to the food nutritional security);
- Promote biodiversity and differentiate agricultural productions to facilitate the diversification of the diets and safeguard the environment;
- Encourage the combined and coordinated use of different technologies, such as genetic improvement and agronomic practices, to obtain sustainable, safe and high quality productions;
- Combine all the available technological approaches, including the new breeding technologies (NBTs), to improve the agronomic productions and consequently consumers' health, at the same time contributing to the sustainable development of European economy.

Within this framework, in 2019 EPSO promoted the discussion on topics of high relevance for the scientific community, through a series of actions including:

- The "Statement on the Court of Justice of the EU ruling regarding mutagenesis and the GMO Directive", a comment on the decision of the European Court of Justice of July 2018. In this "Statement" EPSO actively supports a revision of the European legislation concerning genetically modified organisms;
- The organization of the first meeting "Genome editing – improving legislation and starting flagship projects to better address climate, environmental, food and health challenges" where Ministry representatives from different European Nations have been invited to discuss the perspectives of plant genome editing;
- The EPSO contribution to the consultation by the European Commission "Orientations towards first Strategic Plan for Horizon Europe – vs 2", regarding the strategic planning of Horizon Europe.

EPSO continued to provide strategic input as official observer in the ERA-CAPS (ERA network on Molecular Plant Sciences), ERA-SusCrop (ERA network on Sustainable Crop production) and the "Joint Programming Initiatives (JPIs), Agriculture, food security and Climate Changes (FACCE) and Human Diet and Health (HDHL). EPSO is currently partner in three projects (TOMRES, CHIC and CropBooster) funded by the European Commission.

EPSO has reinforced its participation as representative of Academic Institutions in the “Plants for the Future” European Technology Platform (PLANT ETP - <http://www.plantetp.org/>), which gathers stakeholders from academia, industry and farming communities to promote Innovation, Research and Education in the plant sector.

EPSO carries out an intense activity of scientific dissemination and coordinates the Fascination of Plants Day, an international initiative which involved 51 countries and realized more than 800 events in its 2019 edition. In Italy, the event has been coordinated by researchers from CNR and University of Turin and was realized with the participation of several CNR Institutes.

### **3. Activities carried out by the representative within EPSO during 2019 and impact on the Italian scientific community**

Two Board of Directors meetings were held in 2019 (Brussels, Belgium, 24<sup>th</sup> April and 26<sup>th</sup> November) in which the CNR substitute Angelo Santino participated as board member. The CNR representatives (delegate and substitute) also participated to the General Meeting, which was held in Vienna (Austria), on 11<sup>th</sup>-13<sup>th</sup> June 2019.

The CNR delegate Aldo Ceriotti participated in a meeting of the Working Group “Agricultural Technologies” which was held in Milan on 27<sup>th</sup> March. The Working Group addressed issues related to the regulation of genome editing in Europe and to the implementation of the Nagoya protocol, which imposes tight restrictions to the international exchange of genetic material.

The substitute Angelo Santino participated in the activities of the Working Group “Nutritional Security”, including the meeting organized in Berlin in November 2018. The scope of the Working Group is the development of a comprehensive strategy to ensure a better nutritional security to European citizens. For this scope, a recommendation letter to the European community is being drafted, to ask for support to research actions aiming to:

- Recover and valorize underused species with high content of nutraceutical compounds;
- Develop innovative strategies for the genetic improvement of cultivated plant species, and improve the content of bioactive compounds in edible tissues;
- Highlight the links between a healthy diet and the prevention of important human pathologies.

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

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

The EPSO membership allows to participate in a constant discussion on the strategic development of European plant science and of the agricultural research sector at large, also providing opportunities to bring these issues to the attention of the European policy makers.

EPSO regularly informs members about upcoming events, initiatives and activities, and publishes a newsletter distributed through the EPSO website. The Annual General Meeting is also an important opportunity to collect information about EPSO activities, to discuss general strategies, and plan future initiatives. 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 develop into research partnerships and joint projects.

Through EPSO, the National plant science community participates in the activities of the European Technology Platform Plant ETP, and contributes to the organization of the biannual conference “Plant Biology Europe” (next edition to be held in Turin in 2021), with a wide participation of European plant scientists.

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

Four other Italian institutions, in addition to CNR, are current members of EPSO: University of Milan, University of Bologna, University of Turin and University of Udine.

CNR scientists participated to EPSO activities by contributing to the group of "EPSO Supporting Scientists", and/or by the participation in EPSO working groups such as the ones on "Agricultural Technologies", "Nutritional security" and "Horticulture".

To further stimulate the active participation of the Supporting Scientists, an internal meeting was organized to illustrate the major points discussed and approved at the 2019 General Meeting of Vienna. In this meeting, the need to stimulate the involvement of supporting scientists to EPSO Working Groups was highlighted. This would foster the interaction with European colleagues and the development of scientific networks which can be the basis for the presentation of research proposal in the upcoming Horizon Europe 2021-2027 program. The possibility of expanding the group of "Supporting Scientists" with the involvement of young scientists was also discussed.

## 6. Italian experts with important roles within EPSO or within related Commissions and Programs

The CNR Delegate was elected as member of the Board of Directors in 2013, and the appointment was renewed for three further years at the General Meeting in 2015. In the Board Meeting held in Brussels on 29 March 2017 the CNR Delegate Aldo Ceriotti was elected President of the association till the end of his second term (30 November 2018). At the General Meeting in Copenhagen (June 2018) the CNR substitute Angelo Santino was elected member of the EPSO Board of Directors. His three-year term started on 1 December 2018. As board member, Angelo Santino participated in the meetings of the Board of Directors carried on in 2019.

## 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. The participation of CNR in EPSO is of particular relevance for the preparation phase of Horizon Europe, the next research and innovation framework programme. 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.

Milano, 6/8/2020

Aldo Ceriotti



Angelo Santino

