

European Plant Science Organisation Activities' Report - Year 2020

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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 2020 relevant for Italy and for CNR

In 2020 EPSO carried on several actions of relevance for European research policies. The main goals of EPSO's activities were to:

- highlight the scientific and social importance of plant research;
- develop an integrated approach to achieve sustainability and meet nutritional security challenges;
- promote the diversification of diets and reduce the environmental impact of agriculture;
- encourage the combined and coordinated use of different technologies, including traditional breeding, New Breeding Technologies (NBTs) and agronomical practices, to obtain sustainable, safe and high-quality products;
- contribute to the improvement of consumers' diets and health, at the same time fostering the sustainable development of European economy.

EPSO continued to provide strategic inputs as official observer in different research programs including 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). In 2020 EPSO has been partner of TOMRES, CHIC and CropBooster H2020 projects, funded by the European Commission.

EPSO 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 should have been held in 2021 but, due to COVID-19 pandemic, had to be postponed to 2022, still leaving open the possibility to organize regional events in 2021.

3. Activities carried out by the representative within EPSO during 2020 and impact on the Italian scientific community

The CNR deputy delegate Angelo Santino participated as Board Member in the three meetings of the Board of Directors which were held online in 2020 (April 2, May 5 and November 30). The CNR delegates also participated in the General Meeting, which was held online on July 2-3. The General Meeting included a general part (July 2) organized by the EPSO office, and a regional part (RGM) organized by the CNR delegates. This event was held online with the participation of other Italian (University of Turin, University of Milan, University of Bologna, University of Udine), Serbian and Bulgarian Institutions. Furthermore, other Institutions, which expressed their interest to join EPSO, were invited to attend the RGM.

The CNR delegate Aldo Ceriotti attended the meetings of the "Agricultural Technologies" Working Group, which were held online on March 19 and November 24. The Working Group addressed issues related to the

regulation of genome editing in Europe and the implementation of the Nagoya protocol, which deals with the international exchange of genetic material.

EPSO also promoted a series of events concerning the application of Genome Editing in agriculture. Two meetings were held in 2020, on January 24th and November 3rd. The meetings were held according to the “Chatam House Rules”, with scientific and policy representatives from several countries who informally debated the perspectives of Genome Editing in Europe. A report of the meetings is published in the EPSO website.

The deputy delegate Angelo Santino is co-coordinator of the Working Group “Nutritional Security”. The scope of the Working Group is the development of a comprehensive strategy to improve nutritional security at the European and global level. With this aim, an official document entitled “Contributions from plant science towards nutritional security and human health” was developed, highlighting the following strategic actions:

- Recover and valorize underused species with high content of beneficial compounds;
- Develop innovative strategies for the nutritional improvement of crops;
- Highlight the links between a healthy diet and the prevention of human pathologies.

The document was used by EPSO within communication activities with DG-AGRI and DG-R&I.

Another document entitled “Addressing SDGs2 and 3 is crucial in Covid-19 pandemic time” was included in the EPSO newsletter in autumn.

The active participation in 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 which are of high relevance for the national scientific community and the strategic programming of European research. All these activities were functional to improve the participation of CNR and of the Italian plant science community in the development of European and global policies.

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

The EPSO membership allows the participation in a constant discussion forum on the strategic development of European plant science and the agricultural research sector at large, and provides opportunities to bring relevant issues to the attention policy makers.

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 contribute to EPSO strategies for the development of 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.

Through EPSO, the national plant science community participates in the activities of the European Technology Platform “Plants for the Future” (Plant ETP), and contributes to the organization of the biannual conference “Plant Biology Europe” (last edition was held from June 28 to July 1, 2021), with a wide participation of plant scientists from Europe and beyond.

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

Five 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.

CNR scientists participated in EPSO activities by contributing to the group of “EPSO Supporting Scientists”, with scientific competencies spanning the main areas of plant biology.

To further stimulate the active participation of CNR Supporting Scientists, internal meetings were organized to illustrate the major points discussed at the General Meeting. In these meetings, the involvement of supporting scientists in EPSO Working Groups was encouraged in order to improve interactions with the European plant science community.

In 2020 the group of “EPSO Supporting Scientists” was renovated. In collaboration with the CNR Unit “European and International Relationships”, a CNR internal call was launched in December 2020. Currently, the group of Supporting Scientists is composed of eight researchers from two CNR Departments.

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

The General Meeting held in June 2018 in Copenhagen elected the CNR deputy delegate Angelo Santino as member of the Board of Directors, whose three-year term started on 1st December 2018. As Board member, Angelo Santino participated in the meetings of the Board of Directors in 2020.

The CNR delegate Aldo Ceriotti participated in the 2020 General Meeting (online), and assisted Angelo Santino in the organization of the Regional Meeting (online).

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 delegates and the whole CNR community of plant scientists are part of a large European-level discussion forum, and have the opportunity to contribute to the development of future 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, 19/07/2021

Aldo Ceriotti



Angelo Santino

