



Editorial: Current Research on Soil Science and Related Aspects of Environmental Sciences in Galicia

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Editorial on the Special Issue

Current Research on Soil Science and Related Aspects of Environmental Sciences in Galicia

As recently as under 200 years ago, soil was almost unknown as subject of scientific study, and its status was far from being part of the disciplines taught at universities (Brevik, 2005; Brevik and Hartemink, 2010; Díaz-Raviña and Caruncho, 2022; Reyes-Sánchez and Irazoque, 2022). Nowadays, however, Soil Science is a consolidated field of knowledge, with clear recognition at academic, scientific, and technical levels. In Spain, the Spanish Society of Soil Science (*Sociedad Española de la Ciencia del Suelo*, SECS) has reached 75 years of history, while in Galicia, Soil Science is commemorating 70 years. Throughout all this time, many professors and researchers have contributed their dedication and efforts to promote Soil Science in Spain and Galicia. Among them, Dr. E. Huguet del Villar, Dr. J. M. Alvareda, Dr. F. Guitián Ojea, and many others who followed them and who unfortunately are no longer with us. Those of us who continue to work in this field, as heirs to their legacy, will try to maintain and transmit their in-depth knowledge and impression to the next generations.

The first studies on the soils of Galicia date back to the 1930s, carried out by Huguet del Villar, with his publications on the types of soils in Galicia (Huguet del Villar, 1935) and the Soil Map of the Lusitano-Iberian Peninsula (Huguet del Villar, 1938). After various other studies that followed those original ones, more recently several books were also published on the types of soils in Galicia, such as the one focusing on Soils in A Coruña province (Macías and Calvo, 1992), a chapter on Galician soils (Macías and Calvo, 2001), or the review on the soils of a wider area (the temperate-humid zone of Spain) carried out by Carballas et al. (2016).

Soil has played a crucial role throughout human history. Regarding Soil Science, the knowledge generated by soil scientists has contributed to alleviating hunger in many parts of the world, has favored the restoration of degraded ecosystems, and currently helps us to face new challenges, such as the fight against global warming or the eutrophication of surface waters. However, we must also bear in mind that many soil scientists have the perception that soil and Soil Science do not receive the same social recognition as other related areas. For this reason, while advancing in scientific knowledge, we should also move ahead in the dissemination of our science. In this sense, the present SI of the SJSS aims to collect the results of research lines that address relevant and/or novel aspects related to Galician soils and other environmental compartments, ranging from the incidence of antibiotics in agricultural soils to the quantification of Blue C in *Zostera* soils in the Ría of Ferrol, among others. In fact, we take into account that, as artistic shows do, Science must go on and must be continuously updated and fed with the latest findings. The Editors of this Special Issue hope that all the papers included in it will contribute to showing what could be seen as a kind of interesting and stimulating performance focused on hot topics in Soil and Environmental Sciences, which take place in this geographic area, but are also relevant at a global level.

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Specifically, the paper by Barreiro et al. focused on quantifying a variety of antibiotics present in sewage sludge, soils, corn, and grape samples after the spreading of sludge, whereas the one by de la Cerda-Marin et al. dealt with the study of blue carbon stock in *Zostera marina* meadows in the Ría of Ferrol. In turn, the study by Chaves and Monterroso reported details on the agricultural use of pesticides in Galicia during the 20th century, providing an inventory of active substances and their geographic distribution, while the research by Gómez-Armesto et al. was directed towards determining mercury content and pools in complex polycyclic soils from a mountainous area in Galicia. López-Mateo et al. investigated toxic and trace metals in grassland soils of Galicia, while the work by Rodríguez-Blanco et al. was about “Nitrate and Phosphorus Transport in a Galician River (NW Iberian Peninsula): Insights From Fourteen Years of Monitoring.” Rodríguez-González et al. carried out a study on microbial communities affected by clarithromycin addition in four acid soils, whereas Rodríguez-López et al. investigated the “Influence of pH, Humic Acids, and Salts on the Dissipation of Amoxicillin and Azithromycin under Simulated Sunlight.” Finally, the paper by Santás-Miguel et al. studied “Soil Bacterial Community

Tolerance to Three Tetracycline Antibiotics Induced by Ni and Zn”.

We really hope that this SI will contribute to stimulating further research on Soil and Environmental Sciences in Galicia, in Spain, and globally, thus continuing the work of our predecessors. We are confident that present and future researchers will be able to reap what these key soil scientists have sowed. To end this editorial piece, just a wish for all of us: May Science be with you!

AUTHOR CONTRIBUTIONS

All authors listed have made a substantial, direct, and intellectual contribution to the work and approved it for publication.

CONFLICT OF INTEREST

The authors declare that the research was conducted in the absence of any commercial or financial relationships that could be construed as a potential conflict of interest.

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