



Herbicide Physiology and Environmental Fate

Guest Editors:

Prof. Dr. Luis Antonio de Avila

Department of Crop Protection,
Federal University of Pelotas,
Pelotas, RS, Brazil

Prof. Dr. Nilda Roma Burgos

Department of Crop, Soil, and
Environmental Sciences,
University of Arkansas,
Fayetteville, AR, USA

Deadline for manuscript
submissions:

closed (10 September 2021)

Message from the Guest Editors

Herbicide is an important tool for weed management and have been increasing in use in the last century. Herbicides provide several benefits to the farm and enable efficient food and fiber production to meet the global food demand. When choosing and using a herbicide program for weed management, the producers and agronomists must take into account two aspects, first the efficacy for weed control; and second, the fate of the chosen herbicides in the environment. The balance of these two aspects will allow for sustainable weed control and the protection of areas surrounding the farm, which may include non-target organisms, reservoirs, streams and other bodies of water, or the environment per se.

This Special Issue focuses on the physiology of herbicides in plants, which is affected by biological (tolerance or resistance), environmental (biotic or abiotic stresses, and climate change) and chemical factors (herbicide mixture interactions, adjuvants); and, the behavior of herbicides in the environment which modifies herbicide efficacy and longevity and thereby also affecting non-target organisms and crops with time.





an Open Access Journal by MDPI

Editor-in-Chief

Prof. Dr. Les Copeland

Sydney Institute of Agriculture,
School of Life and Environmental
Sciences, The University of
Sydney, Sydney, NSW 2006,
Australia

Message from the Editor-in-Chief

Agriculture (ISSN 2077-0472) is an international, crossdisciplinary and scholarly open access journal on the science and technology of crop and animal production, and management of the natural resource base for agricultural production. *Agriculture* is published in an open access format – research articles, reviews and other contents are released on the internet immediately after acceptance. The scientific community and the public have unlimited and free access to the content as soon as it is published.

Author Benefits

Open Access: free for readers, with article processing charges (APC) paid by authors or their institutions.

High Visibility: indexed within Scopus, SCIE (Web of Science), PubAg, AGRIS, RePEc, and other databases.

Journal Rank: JCR - Q1 (*Agronomy*) / CiteScore - Q2 (*Plant Science*)

Contact Us

Agriculture Editorial Office
MDPI, St. Alban-Anlage 66
4052 Basel, Switzerland

Tel: +41 61 683 77 34
www.mdpi.com

mdpi.com/journal/agriculture
agriculture@mdpi.com
X@AgricultureMdpi