





an Open Access Journal by MDPI

Implications of Climate Change for Weed Evolution and Herbicide Efficacy

Guest Editor:

Prof. Dr. David Clements

Department of Biology, Trinity Western University, Langley, BC V2Y 1Y1, Canada

Deadline for manuscript submissions:

closed (15 October 2020)

Message from the Guest Editor

Dear Colleagues,

With atmospheric CO2 increasing approximately 30% since the 1950s, resulting in widespread changes in temperature, precipitation, and extreme weather events, weed management implications are inevitable. Herbicide efficacy is altered under these changing conditions. Of central importance to addressing these issues is understanding how weeds evolve. It is clear weeds are highly capable of evolving herbicide resistance. Climate change is frequently classed as a wicked problem, meaning the problem is virtually intractable due to its dynamic complexity. There is an urgent need for improved understanding of the interactions between climate change and herbicide efficacy as mediated by weed evolution.

This Special Issue will take on the wicked problem presented by weed evolution under climate change and its potential impacts on herbicide efficacy. I welcome submissions of novel research or reviews on any related topics including the relationship of climate change to weed ecophysiology, weed epigenetics and plasticity, herbicide technology, herbicide resistance, weed and crop phenology, weed distribution changes, and holistic management approaches.

Prof. David Clements









an Open Access Journal by MDPI

Editor-in-Chief

Prof. Dr. Peter Langridge

School of Agriculture, Food and Wine, University of Adelaide, Urrbrae, SA 5064, Australia

Message from the Editor-in-Chief

Agronomy draws together researchers from diverse areas of agricultural research with a common aim of enhancing agricultural productivity globally. The journal provides unlimited free access to all those interested in advancing agricultural science from both the research and general community. Papers are released immediately after acceptance through the internet. Agronomy is supported by our authors and their institutes through low article processing charges (APC) for accepted papers. We hope you will support the journal by becoming one of our authors

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, and other databases.

Journal Rank: JCR - Q1 (Agronomy) / CiteScore - Q1 (Agronomy and Crop Science)

Contact Us