Special Issue

The Bioecology and Sustainable Management of Weeds

Message from the Guest Editors

Weeds, as the most important pest of agricultural systems, cause an enormous reduction in crop yield worldwide due to their strong adaptability and aggressive competitiveness in the agricultural environment. The use of herbicides is the most economic and effective weed control practice; however, excessive dependence on chemical herbicides has led to a shift in the occurrence and distribution of weeds and weed community succession, especially in terms of the evolution of herbicide-resistant weeds. Weed management is an emerging challenge, highlighting the urgent need to explore sustainable management strategies. An understanding of the evolution of agricultural weeds and crop-weed interactions will be crucial for improving weed management and crop breeding. Therefore, we need to extensively research the population dynamics, genetic evolution, and resource allocation mechanisms of the weeds in competition with crops. This Special Issue of *Plants* will highlight the evolutionary dynamics of weeds, their competition and adaptation mechanisms, the interaction mechanisms between weeds and crops, and new efficient and sustainable weed management practices.

Guest Editors

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Message from the Editor-in-Chief

Plants is an open access journal which provides an advanced forum for research findings in areas related to plant function, its physiology, biology, taxonomy, stresses, and its interactions with other organisms. It publishes original research articles, reviews, reports, conference proceedings (peer reviewed full articles) and communications. In original research papers, it is important that full experimental details are provided. We also encourage timely reviews and commentaries on topics of interest to the plant research community.

Editor-in-Chief

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