



Physiological and Ecological Characteristics, and Sustainable Production of High Yield Maize

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Message from the Guest Editors

Dear Colleagues,

To meet the food requirements of the global population, an additional 70–100% increase in food production is needed by 2050. Achieving this without expanding cultivation into natural ecosystems will depend on raising the yield per unit area. Maize (*Zea mays* L.) is one of the main staple crops and has the highest grain yield per unit area in the world. The grain yield of maize has increased considerably in many countries of the world, such as China and the U.S. However, the actual maize yield is far lower than the potential yield. Therefore, obtaining high maize yield is a constant target of agriculture, in order to ensure food security. To achieve a high yield of maize, it is necessary to clarify the cultivars, key field management practices (irrigation, fertilizer, etc.), plant patterns, and the related physiological and ecological characteristics, all of which will be useful in developing strategies for sustainable production.

This Special Issue focuses on the key cultivation measures, and the physiological and ecological characteristics of maize with a high grain yield. Original research articles about these topics will be accepted.





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Message from the Editor-in-Chief

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