Special Issue

Photosynthetic Carbon Metabolism to Enhance Crop Productivity

Message from the Guest Editor

With significant increases in the global population, and the accelerating changes in climate, maintaining future increases in yields of food and fibre crops is coming under serious threat. The impact of climate change will intensify with the continued reductions in arable land and the availability of water that is often limiting for crop production. Future climates are predicted to increase the intensity and frequency of extreme events, such as heatwaves and changes in rainfall patterns associated with droughts. Crops will now need to be equipped with flexible strategies to cope with these extreme climates to mitigate declines in productive yields associated with climate variability. The objective of this Special Issue is to provide new research and review articles on recent advances in improving crop resource-use efficiency associated with improving photosynthesis and carbohydrate metabolism. The scope of this Special Issue will encompass all aspects of photosynthesis and respiration and the use of breeding and molecular engineering efforts to enhance crop productivity to mitigate the influence of future changes in climate.

Guest Editor

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Editor-in-Chief

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