

## Special Issue

# Efficient Utilization of Water and Fertilizer Resources for Crops and Enhancement of Farmland Fertility and Productivity

### Message from the Guest Editors

In recent decades, the area of cultivated land has been continuously decreasing, and the fertility of cultivated land has shown a downward trend. There is still considerable room for improvement in the productivity of cultivated land worldwide. Traditional agronomic management methods have greatly affected the cultivated land ecosystem, the imbalance between agricultural production and the environment remains a major obstacle to achieving sustainable crop production. With the advancement of technology, numerous agronomic management methods have been proposed to promote crop productivity and improve the quality of cultivated land, such as water management, fertilizer regulation, straw return, and conservation tillage. It is necessary to explore the influence mechanisms of these agronomic management methods on crop production and soil fertility, as well as their synergistic effects on production and ecological functions. Through comprehensive research on the efficient utilization of water and fertilizer resources, and the improvement of crop productivity and soil fertility, we aim to address the contradiction between agricultural production and environmental sustainability.

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