



The Impact of Mulching on Crop Production and Farmland Environment

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Message from the Guest Editors

Mulching is an important agricultural production measure that is beneficial for promoting crop yield, reducing water use efficiency, controlling weeds and pests, and preventing soil erosion. Various mulching materials and mulching modes have different impacts on crop production and the soil environment.

However, the inappropriate use of mulching, especially plastic film mulching, can lead to negative environmental impacts. Residual plastic film in the soil can damage its granular structure, reduce its permeability, and worsen its physical and chemical properties, directly affecting crop growth.

Therefore, this Special Issue seeks to publish related research on (1) the impacts of various mulching materials and modes on crop production, including but not limited to crop yield, water use efficiency, and nutrient recycling; and (2) the active and negative impacts of mulching on the farmland environment, including but not limited to greenhouse gas emissions, active nitrate leaching, ecosystem services, and microplastic pollution.





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