

Special Issue

Application of Sensors for Mechanical Weed Control

Message from the Guest Editor

Sensor technologies have been developed to automatically guide mechanical hoes in the center between two crop rows. More sophisticated algorithms of plant species identification were implemented in weeding robots to detect weeds within crop rows and selectively control them without damaging the crop. Lately, neural networks have been trained for the classification of weed and crop species. Those information technologies have improved efficacy and selectivity of mechanical weed control. However, there is a great potential for improving and automating mechanical weed control in arable, vegetable, and permanent cropping systems. Sensor technologies can be used to vary the intensity of harrowing, support decision rules for mechanical weed control, and collect information on crop development and quality.

Guest Editor

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