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Metagenomics Analysis of Bacteria in Sorghum Using next Generation Sequencing

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Abstract : Sorghum is an important cereal crop in the world. In particular, it has attracted breeders due to capacity to serve as food, feed, fiber and bioenergy crop. Like any other plant, sorghum hosts a variety of microbes, which can either, have a neutral, negative and positive influence on the plant. In the current study, regions (V3/V4) of 16 S rRNA were targeted to extensively assess bacterial multitrophic interactions in the phyllosphere of sorghum. The results demonstrated that the presence of a pathogen has a significant effect on the endophytic bacterial community. Understanding these interactions is key to develop new strategies for plant protection.

Keywords : bacteria, multitrophic, sorghum, target sequencing
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