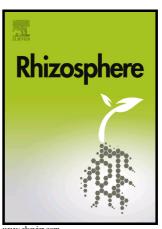
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Rhizosphere engineering: innovative improvement of root environment

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Abstract

The ability of roots to extract water and nutrients from soil depends on the biophysical properties

of the rhizosphere, which are strongly influenced by mucilage secretion. The aim of this study

was to introduce the concept of rhizoligands to engineer the biophysical properties of the

rhizosphere. A rhizoligand is defined as an additive that increases the wettability of the

rhizosphere and links the mucilage network to main intimate contact with the root surface. We

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