



Should rhizosheath formation be considered when selecting crops? A review.

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The rhizosheath is the soil that is bound to the root and remains attached even after the root is excavated. It's physical attachment to the root provides a site of most intensive root:soil interaction, and an ecological niche for soil microbiota. Investigations are beginning to unravel the complexities of rhizosheath formation, including the importance of soil wetting/drying cycles, mucilage secretion from the roots and the unique colonies of micro-organisms that use this mucilage as a carbon source. But why is this important? Within the broader context of declining soil productivity and increased food demand, I explain the merits and potential benefits of better understanding rhizosheaths and how they could help to improve crop resource use efficiency.