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Effect of soil compaction on root growth and crop yield in Central and Eastern Europe



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abstract Variations in root growth and functions in response to soil compaction associated with soil and crop type, and soil wetness at the time of load application and weather in Central and Eastern Europe are reviewed. The effects of soil compaction on the morphological and anatomical modifications of the roots were shown. The influence of soil compaction on plasticity in root growth and functioning in relation to structural discontinuity is discussed. Possible mechanisms of root-shoot relations as affected by soil compaction are presented. Crop yields on compacted soil largely depend on weather conditions and initial soil compactness.

keywords soil compaction, root growth and functions, root-shoot relations

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