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农学—研究进展

植物与微生物互作的研究进展

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摘要：

植物与其生长环境中的微生物关系密切，两者形成了植物—微生物共生体系统。植物影响着其周围及体内的微生物的群落结构，这些微生物又通过其生命活动影响植物的生长发育。了解与认识植物与微生物的相互作用对于农业生产具有重要意义。本文就植物类型及植物根系分泌物对微生物群落结构及多样性的影响，植物根际微生物、叶围微生物和内生菌（包括内生真菌、内生细菌以及内生放线菌）对植物生长发育的影响等进行了综述，并就其将来的研究方向做了展望。

关键词： 内生菌

Research Progress of Interaction between Plant and Microorganism

[1],

Abstract:

Plants and the microorganisms in their growth environment have close relationships, which form the plant-microorganism symbiont system and interact mutually. Plants affect microbial community composition in the surroundings and the microorganisms also have an influence on plant growth. It is of great importance for agricultural production to understand and recognize the interaction between plants and microorganisms. This paper reviewed the effects of plant types and root exudates on the microbial community composition and diversity, stated the influences of rhizosphere microbes, phyllosphere microbe and endophyte (including the endophytic fungus, the endophytic bacteria and the endophytic actinomycete) on plant growth, and prospected the related research interests in the future.

Keywords: endophyte

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