

植物保护—研究报告

麻疯树根腐病病原菌有性阶段的调查及鉴定

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摘要:

调查研究麻疯树根腐病主要病原菌——镰孢菌(*Fusarium* sp.)的有性世代, 为病害流行病学及其防治工作提供科学依据。通过实地调查、标本采集、分离培养、致病性测试、形态特征观测等, 结合相关文献资料, 确认麻疯树根腐菌的有性世代及其分类地位。结果表明在阴蔽潮湿以及具多个种源混栽的环境条件下, 麻疯树根腐病的病原菌能够产生有性世代; 致病性接种试验结果表明该有性世代能够导致寄主植物感病, 其再分离培养物具有无性世代的典型特征; 通过对有性世代的形态特征进行细致观测, 将其鉴定为*Haematonectria haematococca* (Berkeley & Broome) Samuels & Nirenberg, 其无性世代同时被确认为腐皮镰孢菌*Fusarium solani*(Martius) Appel & Wollenweber。麻疯树腐皮镰孢菌在特定条件下能够产生有性世代; 避免多个种源混栽、通风透光、降低空气湿度是避免病原菌有性世代发生、减缓病害发生发展速度的一个重要措施。

关键词: 有性阶段

Study on the Sexual Stage of the Root Rot Disease Pathogen in *Jatropha curcas* L.

Abstract:

The aim was to investigate the sexual stage of the root rot disease pathogen in *Jatropha curcas* L., and provide the epidemiology and control measures for the disease. By ways of field investigation, specimen collection, isolation, cultivation, pathogenicity test, morphological characteristics observation, combined with literature reviews, sexual stage of the pathogen was identified. The sexual stage of the pathogen was only produced in shading and moist environment, with different provenances of host plants being planted together; pathogenicity test showed that the teleomorph was virulent to the host plant, and the reisolates had similar morphological characteristics with that of original anamorphs; the teleomorph was identified as *Haematonectria haematococca* (Berkeley & Broome) Samuels & Nirenberg, and the anamorph *Fusarium solani* (Martius) Appel & Wollenweber. Sexual stage of the pathogen could be produced under certain conditions. Avoiding the mixed plantation of different provenances, keeping ventilation and light- penetrating, and decreasing relative humidity were the measures to prevent the disease fast spreading.

Keywords: *Fusarium solani*

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