SIMPLE SELECTIVE MEDIA FOR ISOLATING TRICHODERMA VIRENS STRAINS FROM FIELD SOIL AND COTTON ROOTS

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Abstract

Trichoderma virens is an effective biocontrol agent for cotton seedling diseases incited by *Rhizoctonia solani* and *Pythium ultimum*. Strains of *T. virens* fall into two basic groups, the "Q" strains which produce the antibiotic gliotoxin and are more effective against *R. solani* and the "P" strains which produce the antibiotic gliovirin and are more effective against *P. ultimum*. "Q" strains can be selectively isolated from "P" strains and other soil fungi and bacteria by plating soil dilutions on a medium containing rifampicin (50 µg/ml), gliotoxin (40 µg/ml), and chlorothalonil (0.5 µg/ml) in PDA. "P" strains can be selectively isolated from "Q" strains and other soil microbes by plating dilutions on a medium containing rifampicin (50 µg/ml), chlorothalonil (1.25 µg/ml), and Thiabendazole (0.35 µg/ml) in PDA. *T. virens* strains already isolated from other sources may be separated into "P" and "Q" groups by the growth of "P" strains on PDA + Chlorothalonil (1.25 µg/ml) and "Q" strains on PDA + Maxim (20 µg/ml). Other *Trichoderma* species may be separated from *T. virens* by their growth on PDA containing Thiabendazole (0.4 µg/ml) or, with some species, 3% Yucca water extract (Cellucon Inc., Strathmore, CA) which inhibit the growth of *T. virens*.

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