

Molecular Biology

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We have worked out a PCR procedure for identification of different strains of bacterial species from the rhizosphere of soyabean. The technique is more advanced and quick method of identification. It is advantageous over the traditionally used Bergey's manual for distinguishing between different bacterial species, also in this technique inoculation of heterogeneous colonies can be done in place of homogenous colonies. Root samples of different varieties of soyabean were taken this includes soyabean FYM 50%, soyabean LM 75%, soyabean VC 75%, soyabean FYM 75%, soyabean RDF and soyabean control. The procedure involves firstly, the isolation of the bacterial DNA's and then amplification using

PCR by different primers which amplifies the ribosomal DNA specifically. Amplification using F3/R3 primer and amplified all the bacterial DNA's which were isolated from various samples, Amplification using F1/R1 primer amplified only those bacterial DNA'S which were isolated from soyabean FYM 50%, soyabean LM 75% and soyabean control. Amplification using F2/R2 primer amplified only those bacterial DNA's which were isolated from soyabean FYM 50%, soyabean LM 75%, soyabean RDF. The technique described will provide a powerful tool for identification of different bacterial species.