عنوان مقاله:

First record of the bacterium Pseudomonas putida on pepper in Iraq

محل انتشار:

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خلاصه مقاله:

Random samples were collected from the field soil and pepper fruits in different agricultural areas in order to isolate and identify the associated Pseudomonas putida (Trevisan ۱۸۸۹) Migula ۱۸۹۵. The diagnosis process was carried out based on the culture, phenotypic and biochemical characteristics. Once isolation on the nutrient agar food media, pure single or double colonies of P. putida were appeared, exhibiting the ability to grow in Maconkey medium, negative for gram dye, capable of producing yellowish green Pyouverdin dye under ultraviolet rays, characterizing by an undesirable odor. The molecular diagnosis of bacteria was confirmed by DNA secquencing analysis of the complementary DNA (cDNA) of the double–stranded dsRNA (dsRNA) RNA that forms the genome of bacteria during replication. The extraction was performed using the dsRNA dsRNA extraction method from the studied samples and the results of the sequence analysis were compared with the nucleotide database of the NCBI using BLAST. The isolates of bacteria with similar nucleotide sequences were identified and the Iraqi isolate was placed in the phylogenetic tree diagram to show the relationship between the Iraqi isolate and the global ones. Bacterial isolates were recorded in the National Center for Genetic Bank NCBI, European ENA and the Japanese Information .Bank, DNA with Accession Number (s) SUB۹۶۶۶۲۵۵ AHM MZY・۹۱۸۵, which is the first record of P. putida on pepper in Iraq

كلمات كليدي:

biological control, GP bacteria, Soft rot

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