Isolation, characterization and screening of rhizospheric bacteria of Pittosferum resiniferum Hemsl.

Abstract

The bacterial rhizosphere species of host plant, Petroleum Nut (Pittosferum resiniferum) were isolated and characterized morphologically. The isolates were designated as, TSArp-Cr2, TSArp- Cr3, TSArp- Cr4, TSArp- Cr5, TSArp- Cr6 and TSArp- Cr7. All of the species were tested on three different concentration of phenol (1mM, 3mM and 5mM). Only species TSArp- Cr4 and TSArp- Cr6 growth were detected. The highest growth is 6Log10CFU/ml in 1mM by TSA-Cr4. The lowest reading was 3.6 Log10CFU/ml in 3mM by TSA-Cr6. Species TSArp- Cr4 has higher tolerance on phenol compared to TSArp- Cr6