

Characterization and identification of newly isolated *Acinetobacter baumannii* strain Serdang 1 for phenol removal

ABSTRACT

A new indigenous bacterial strain from Malaysian soil contaminated with petroleum waste had been successfully isolated, characterized and identified for phenol removal. The gram negative bacteria showed 98% identity with *Acinetobacter baumannii* based on Biolog[®] Identification System and the determination of a partial 16S ribosomal RNA (rRNA) sequence. The isolate clustered with species belonging to *Acinetobacter* clade in a 16S rDNA-based neighbour-joining phylogenetic tree.

Keyword: 16S ribosomal RNA; *Acinetobacter baumannii*; Phenol; Phylogenetic tree analysis