**Molecular procedure for detection of Burkholderia pseudomallei.**


ABSTRACT

Recently several cases of melioidosis have been reported in the tropical climates, especially in Southeast Asia where, it is endemic, it also occurs sporadically throughout the world. The diagnosis of the acute or chronic infection remains challenging. The present study highlight on the optimized and reliable technique based DNA preparation for use in Polymerase Chain Reaction (PCR) assay. PCR amplification with specific pair of primer for each putative gene was proving specific for amplification of genes in Burkholderia pseudomallei strain D286. The PCR mixture with addition of DMSO, formamide and glycerol could ease the PCR optimization where different pairs of primers were involved. The findings of this study have contributed to some information on the molecular bases of the LPS biosynthesis genes in B. seudomallei specifically for strain D286. The specific primer pairs with the PCR mixture could be used in developing a PCR diagnosis of melioidosis.



**Keyword:** Burkholderia pseudomallei; Lipopolysaccharide; Melioidosis; Polymerase chain reaction; Primers; University Putra Malaysia.