

Summary of the MSc thesis No.,4282 Faculty of Veterinary Medicine, Urmia University.

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Title: The identification of *Burkholderia mallei* with polymerase chain reaction in horse blood samples in Oshnaviyeh

Summary:

Burkholderia mallei is the etiologic agent of zoonotic disease, one of the most dangerous and oldest infectious diseases in monocots. Iran is known as the center of aphids in the world. The present study was performed to molecularly detect *Burkholderia mallei* bacteria from blood samples of horses in the Oshnoyeh region of West Azerbaijan in 1399. A total of 384 blood samples were randomly collected from horses. DNA was extracted from all blood samples. PCR was then used to diagnose *Burkholderia mallei* based on *flip* and *AT5* genes. The results showed that 9.1% of the blood samples were positive for the presence of *Burkholderia mallei*. According to the results of this study, it can be concluded that the report of Glanders in the country, even as a single, is a warning to health and care institutions. Due to the rapid and accurate diagnostic problems of aphid infection, the organism was identified in this study using specific genes by the diagnostic standards of the World Organization for Animal Health (OIE) with high sensitivity and specificity.

Key words: horse, *Burkholderia mallei*, polymerase chain reaction, blood