

Considering Six Type of Porcine DNA Detection on Product, a Literature Review

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Abstract. Porcine is forbidden, as in the Qur'an Surah Al Maidah verse 3, Allah said it is forbidden for you to eat carrion, blood and porcine. So, the only guarantee of the halalness of product is that it is free from porcine. Porcine detection is a laboratory test of a product to determine whether it contains porcine. DNA atau deoxyribonucleic acid is the material that carries genetic characteristics with a definite identity, so that DNA examination is an important examination to determine the presence of porcine in the product. Most of the examination need an analysis the effectiveness of using which methods suitable for any situation. This paper using qualitative methods using literature review from journals to compare six DNA testing methods for detecting porcine in product. Six methods of Porcine DNA detection were obtained, namely PCR, Real Time PCR, DNA sequencing, DNA Microarray and LAMP. The choice of methods used depends on factors such as sensitivity, specificity, cost, availability of equipment, and laboratory staff skills. These six techniques are robust but influenced by sampling technique, sample size, DNA extraction and control sample.

Keywords: DNA, porcine, detection, methods