

**THE EFFECTS OF *Quercus infectoria* GALLS EXTRACTS ON
WOUND HEALING OF MICE**

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ABSTRACT

THE EFFECTS OF *Quercus infectoria* GALLS EXTRACTS ON WOUND HEALING OF MICE.

Quercus infectoria or known as Manjakani in Malaysia is an oak species. Nowadays widely used either in traditional medicinal or even in modern medication such as to treat wound after childbirth. Previous study reported that *Q. infectoria* galls contained high amount of tannin which about 50% to 70% and small amounts of gallic acid and ellagic acid. Based on past pharmacologically study showed that this oak galls possess as astringent, antidiabetic, antitremorine, local anaesthetic, and also anti-inflammatory properties. This present study was conducted to study the effects of *Q. infectoria* galls extract on wound healing of mice. Petroleum ether, chloroform and methanol were used to extract the bioactive compounds in galls of *Q. infectoria*. The percentage yield extract of petroleum ether extract, chloroform extract and methanol extract are 12.60 g, 33.70 g and 44.50 g respectively. Phytochemical screening of the plant extract revealed that tannin was present in petroleum ether, chloroform and methanol plant extract, while saponins only present in petroleum ether and chloroform extract and flavonoids only present in methanol plant extract. A thin Layer Chromatography (TLC) study was conducted for the detection of number of bioactive compounds present in the plant extract. Study also demonstrated a relatively murine model of wound healing that exhibits many of the features observed in human wound healing. From the results, it can be suggested that *Q. infectoria* galls extract at low concentration (25%) have definite positive effects on wound healing of mice.