

ANTI-HELICOBACTER PYLORI ACTIVITY OF THREE MEDICINAL PLANTS

(CINNAMOMUM ZEYLANICUM, SYZYGIUM AROMATICUM

AND ZINGIBER OFFICINALE)

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ABSTRACT

In this study, three medicinal plants Cinnamon (*Cinnamomum zeylanicum*), clove (*Syzygiumaromaticum*) and ginger (*Zingiber officinale*) extracts were examined and screened for anti-*Helicobacter pylori* activity.

Ninety-six percent of methanol was used for the extraction of these plants. It has been shown that *Zingiber* officinale contains high total phenolic compounds content (110 GAE / 100 gextract) in comparison to *Cinnamomum* zeylanicum(98.2 mg GAE / 100 g extract) and *Syzygium aromaticum*(98 GAE / 100 g extract).

The antioxidant activity of our extracts measured by FRAP method indicates that *S. aromaticum* had a high antioxidant activity (107.2 mg AAE / 100 g) relative to*Z. officinale* (105.1 mg AAE / 100 g) and *C. zeylanicum* (58 mg AAE / 100 g).

All studied plants demonstrated strong anti-*H. pylori* activity with minimum diameter of inhibition ranged from 10 to 36mm.

KEYWORDS: *Cinnamomum zeylanicum, Syzygium aromaticum, Zingiber officinale, Helicobacter pylori,* antioxidant activity, antibacterial activity