

## ABSTRACT

Propolis extracts use in folk medicine has still one of the most frequently applied natural antibiotics for treatment of wounds, burns, soar-throat, and stomach ulcer. The main objectives of this research was to determine equine cutaneous wound healing properties of ethanolic extractions of Thai propolis and to determine the antibacterial properties of Thai propolis against pathogenic bacteria isolated from the chronic cutaneous horse wounds. Propolis samples were collected from *Apis mellifera* colonies from Chiang Saen, Chiang Rai. Eleven out of 36 horses (30.5%), 2 horses (5.6%) in Faculty of Veterinary Medicine, Chiang Mai University; 5 (14%) in Lanna Riding Club, and 3 (8.3%) in Pack Squad Army Battalion were used in this experiment. Wounds were evaluated by bed tissue color, measurement of wounds and calculation of wound contraction rate. The results of this study have demonstrated that ethanolic extracts of propolis healed chronic second-infection of the body wounds whereas the wounds on the distal parts of limbs were not cured. Three types of pathogenic bacteria viz *Streptophylococcus saprophyticus*, *S. haemolytius* and *S. intermedius* were isolated from the wounds. The results demonstrated that all three pathogenic bacteria were susceptible to EEP and that body wounds cured faster than lower limb wounds. Ethanolic extracts of Thai propolis can heal chronic wounds of horses and also wounds caused by IBH. Thai EEP can inhibit the growth of three pathogenic bacteria isolated from the wounds. Thai propolis has also antibacterial and cell generating properties.