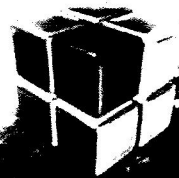




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Bioassay Guided Isolation of an Antidermatophytic Active Constituent from the Stem Bark of *Entada Spiralis* Ridl.

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Abstract: *Entada spiralis* Ridl. (Leguminosae) is a liana or woody climber that grows in the wild in Malaysia and is known locally as 'Beluru' or 'Sintok'. The isolation and characterization of the chemical constituent from an active fraction of *E. spiralis* stem bark has been carried out. Our previous study revealed that methanol extract of *E. spiralis* stem bark exhibited promising antifungal activity against three dermatophyte strains, namely *Trichophyton mentagrophytes* ATCC 9533, *Trichophyton tonsurans* ATCC 28942 and *Microsporum gypseum* ATCC 24102 that cause skin infection. This study was performed to elucidate the structure of active constituent known as ester saponin from the active fraction of *E. spiralis* stem bark. The fractions were prepared using fractionation process and repeated antifungal test was conducted to identify the most active fraction. The structure elucidation of this compound was based on spectroscopic data (¹H, ¹³C NMR, HMQC, HMBC and DEPT135) and comparison with literature. On the basis of spectroscopic analysis, the compound was identified as 28- α ,L-rhamnopyranosyl-18,21,22-trihydroxy-12-en-29-(2-acetylamino- β -D-glucopyranosyl) triterpene ester. The current study provides important baseline information for the use of *E. spiralis* stem bark for the treatment of skin infection caused by the microorganisms investigated in this study.

Keywords: Antifungal activity, Dermatophytes, *Entada spiralis*, Leguminosae, Terpenoid

Prevalence of Iron Deficiency Anemia (IDA) among Medical Laboratory Technology (MLT) Students in UiTM Puncak Alam

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Abstract: Approximately two billion people are anaemic based on the haemoglobin concentrations below recommended thresholds suggested by the World Health Organization (WHO). The most common cause of anaemia is iron deficiency anaemia (IDA) which is also known as nutritional anaemia. The aim of this study is to identify the prevalence of IDA among MLT students in UiTM Puncak Alam through laboratory investigations. This cross sectional study was conducted in UiTM Puncak Alam. Five millilitres of blood samples were drawn from each student into ethylenediaminetetraacetic acid (EDTA) tube. The blood samples were used to analyze the Full Blood Count (FBC) and Full Blood Picture (FBP). The serum ferritin test was performed if necessary for confirmation of IDA. The data was analyzed using the SPSS program for Windows version 18.0 and using the Mann-Whitney u test with 95% confidence interval. This study concludes that the prevalence of IDA among MLT students in UiTM Puncak Alam is 5.6%. Out of 162 students involved in this study, nine female students were detected as IDA and none of male student with IDA. This study provided the evidence of IDA among UiTM students in Puncak Alam which could be of importance to overcome of the IDA problem in UiTM Puncak Alam.

Keywords: Iron Deficiency Anemia (IDA), Full Blood Count (FBC), Full Blood Picture (FBP)