

**UNIVERSITI TEKNOLOGI MARA**

**EFFECTS OF GELAM (*MELALEUCA SP.*) HONEY ON  
APOPTOSIS PATHWAY OF COLORECTAL CANCER  
CELL LINES (HCT116)**

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## **ABSTRACT**

Honey is reported to contain various compounds such as phenols, vitamins and antioxidants. The present study investigates the anticancer potential of Gelam honey in colorectal cancer cell lines (HCT116). The cells were treated with decreasing doses of Gelam honey (10-0.01%) for 72 hours. The activation of caspase-3 and -9 were observed in all-Gelam honey-treated cancer cells indicating the involvement of mitochondrial apoptotic pathway. This study shows that Gelam honey has significant anticancer activity against colorectal cancer cell lines.