

**EFFECT OF PURSLANE (*Portulaca oleracea* L.) EXTRACT ON LIVER
HISTOPATHOLOGICAL CHANGE ON RATS
(*Rattus norvegicus*) FED WITH HIGH
FAT DIET**

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ABSTRACT

The objective of this research was to evaluate the effect of *Portulaca oleracea* L. extract on liver histopathological change on rats (*Rattus norvegicus*) fed with high fat diet. For this purpose the rats were divided into five groups of four rats each group as follows. C- group (1 mL of 1% Na-CMC) start at 29th day, C+ group (high fat diet), T1 group (high fat diet + 54 mg/kg bw *Portulaca oleracea* L. extract), T2 group (high fat diet + 108 mg/kg bw *Portulaca oleracea* L. extract), T3 group (high fat diet + 216 mg/kg bw *Portulaca oleracea* L. extract). The high fat diet were given for 56 days, where the extract was administered orally on day 29th until 56th. At the end of exposure, the animals were sacrificed and liver sections were prepared using stained by haematoxylin and eosin (HE) method, examined and photographed using a light microscope. Treating animals with high fat diet (C+) led to different histopathological changes such as degeneration and necrosis of hepatocyte. On the other hand, animals treated with high fat diet and *Portulaca oleracea* L. extract showed an improvement in these changes and the liver appears normal. The result suggested that the ameliorative effect of *Portulaca oleracea* L. extract may be due to its antioxidant properties in combating oxidative stress and tissue injury resulting from high fat diet.

Keyword : *Portulaca oleracea* L., high fat diet, liver, rat.