Phytoconstituents and Pharmocological Activities of Aqueous Hypericum Triquetifolium **Extract from North Palestine** 

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**Abstract** 

Background: Hypericum Triquetifolium (St John's wort) is a plant with yellow, star-shaped flowers

that has five petals it is indigenous to Europe, North and South America, Eastern Asia, Australia and New

Zealand, it is widely used to treat mild to moderate depression. Objective: to investigate the potential

enzymatic activities of aqueous Hypericum Triquetifolium extract and its therapeutic effects. Method:

Aqueous extract of Hypericum Triquetifolium was prepared and tested for the presence of

phytochemical compounds, Antioxidant, Anti-amylase, Anti-glucosidase and Anti-Lipase Activities.

Result: Presence of tannins, flavonoid, saponins, steroids, terpenoids and Glycosides were found in the

aqueous extract of Hypericum Triquetifolium. The results showed that Hypericum Triquetifolium

aqueous extract had potent antioxidant activity [IC50 value=  $(3.23\pm1.55)$  mg/mL] compared to trolox,

also the extract showed a potent  $\alpha$ -amylase inhibitory activity [IC50 value= (38.9±2.55)

mg/mL] as compared to acarbose, the results also showed that the aqueous extract of Hypericum

Triquetifolium had a potent anti-lipase activity with IC50 value range between (37.15±1.91) and

showed no anti-glucosidase activity. Conclusion: These results suggest that Hypericum

Triquetifolium could represent a potential source for the development of novel hypoglycemic drug and

anti-obesity agent.

Keywords: Hypericum Triquetifolium, obesity, diabetes, Palestine