



## Pharmacological Explanation for Medicinal Use of St. John's Wort in The Hypo-Motility Disorder of Gut

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**SUMMARY.** St. John's wort (*Hypericum perforatum*) is widely used in traditional medical system as a laxative agent against gastrointestinal hypo-motility disorders, such as constipation. The present research was carried out to rationalize its therapeutic potential in constipation. St. John's wort aqueous extract (Sw.Aq), which tested positive for presence of flavonoids, saponins and tannins caused concentration-dependent (1.0-10 mg/mL) contractile effect in the isolated rabbit jejunum preparations. Pretreatment of tissues with atropine (0.1  $\mu$ M) abolished the stimulatory effect of Sw.Aq, suggesting that the spasmogenic effect of St. John's wort is mediated possibly through muscarinic receptor activation. In the *in-vivo* studies, Sw.Aq exhibited laxative effect, reflected by increase in number of mice feces. These results indicate that Sw.Aq causes gut stimulation, via cholinergic mechanism and thus provides pharmacological basis for its medicinal use in gut hypo-motility disease, constipation.

**KEY WORDS:** Cholinergic, Constipation, *Hypericum perforatum*, Spasmogenic, St. John's wort.

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