***Cite this as*:** Engy ELEKHNAWY, Duaa ELIWA, Sebaey MAHGOUB, Sameh MAGDELDIN, Ehssan MOGLAD, Sarah IBRAHIM, Asmaa Ramadan AZZAM, Rehab AHMED, Walaa A. NEGM, 2025. Promising protective treatment potential of endophytic bacterium *Rhizobium aegyptiacum* for ulcerative colitis in rats. *J Zhejiang Univ-Sci B (Biomed & Biotechnol)*, 26(3):286-301.
http://doi.org/10.1631/jzus.B2300777

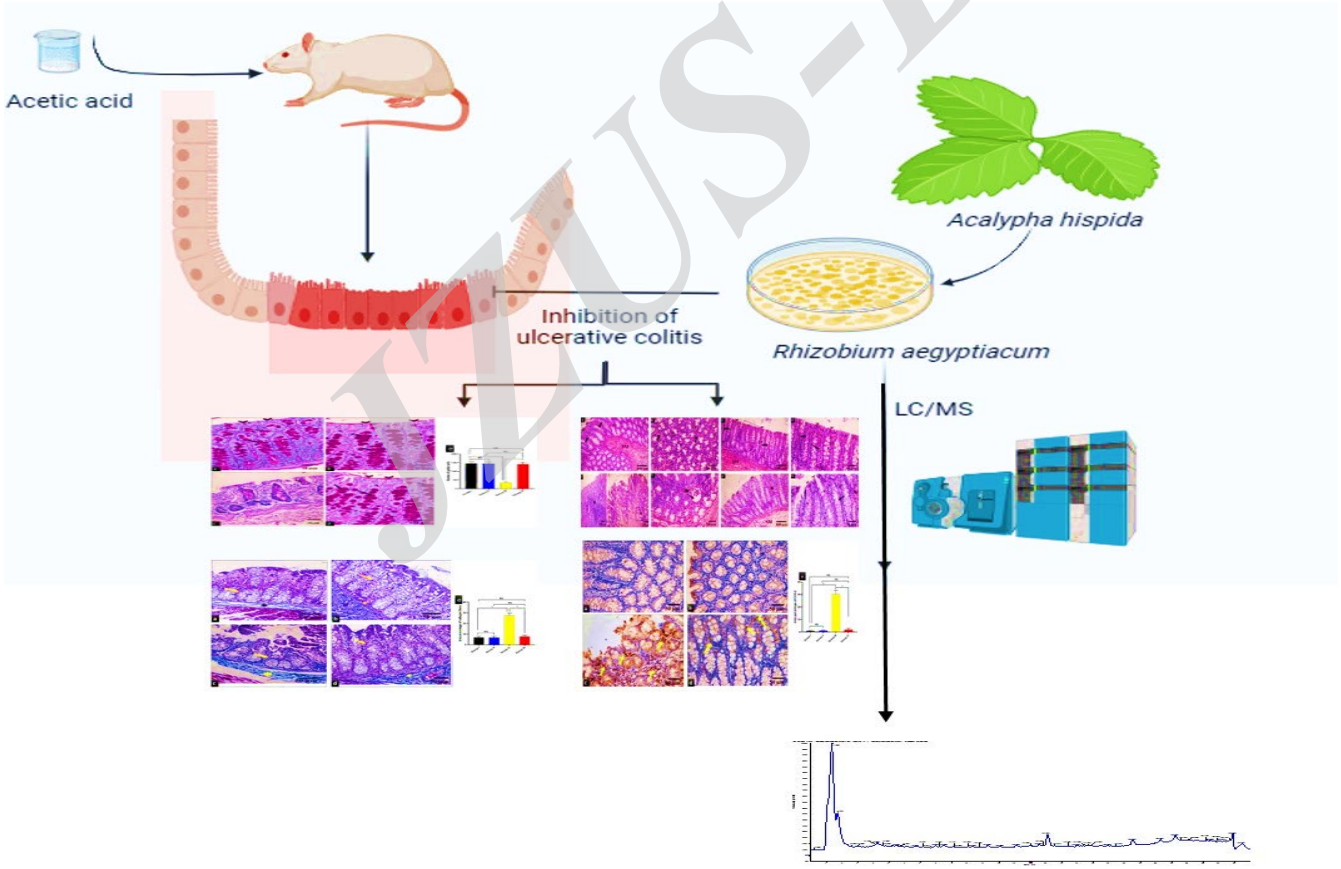
JZUS-B

Promising protective treatment potential of endophytic bacterium *Rhizobium aegyptiacum* for ulcerative colitis in rats

Key words: Inflammatory bowel syndrome, LC-MS/MS, SEM, histology, immunohistochemistry, qRT-PCR

Research Summary

This article is mainly focused on the anti-inflammatory effect of the endophytic bacterium, *Rhizobium aegypticaum*, on ulcerative colitis in rats and summarizes the key roles that was played by such bacterium in the following aspects:



Innovation points

- Isolation of the endophytic bacterium, *Rhizobium aegypticaum*, from leaves of *Acalypha hispida* Burm. f.

- Liquid chromatography-mass spectrometry of the *Rhizobium aegypticaum* extract.

- Investigating the therapeutic effect of the *Rhizobium aegypticaum* extract on ulcerative colitis in rats.

JZUS-B