

The Janus Corner



This occasional section within the journal surveys visions and achievements, often not on the main track of the developing biomedical sciences, but all relating to discoveries and developments of medicinal – both ancient and modern. What they have in common, in one way or another, is providing further background and glances around the edges of the core discipline of pharmacognosy, as it has been and continues to evolve within our times.

Promising Effects of Traditional Chinese Medicines and Isolated Compounds Against SARS-CoV-2

I.E.Cock^{1,2,*}

¹School of Natural Sciences, Nathan Campus, Griffith University, Nathan, Brisbane, Queensland, AUSTRALIA.

²Centre for Planetary Health and Food Security, Nathan Campus, Griffith University, Nathan, Brisbane, Queensland, AUSTRALIA.

Correspondence:

Dr. I.E. Cock^{1,2}

¹School of Natural Sciences, Nathan Campus, Griffith University, 170 Kessels Rd, Nathan, Brisbane, Queensland 4111, AUSTRALIA.

²Centre for Planetary Health and Food Security, Nathan Campus, Griffith University, 170 Kessels Rd, Nathan, Brisbane, Queensland 4111, AUSTRALIA.

Phone no: +61 7 37357637

E-mail: i.cock@griffith.edu.au

DOI: 10.5530/pc.2021.4.42

Traditional Chinese Medicine (TCM) was used effectively to treat previous coronavirus outbreaks with minimal side-effects and several TCMs have been highlighted as potential treatments for COVID-19. In particular, *Glycyrrhiza glabra* L. has been highlighted as useful for decreasing the disease severity in infected people.¹ A recent study published in Pharmacognosy Journal utilised *in silico* prediction based on crystal structures and molecular docking techniques to highlight other promising phytochemicals.² More than 12,000 compounds were highlighted as potential Mpro inhibitors, with the most promising being Aster pentapeptide A, salvianolic acid B, and ligustrazine. The plant species *Zingiberis rhizoma*, *Asteris radix*, *Notoginseng radix*, *Ligusticum chuanxiong*, *Salviae miltiorrhizae*, *Zingiberis rhizoma*, *Dianthi herba*, and *Cistanches herba* were also considered promising. Additionally, gingerketophenol, ginkgol alcohol and ferulic acid were identified as promising ACE2 inhibitors. The plant species *Codonopsis radix*,

Notopterygii rhizoma, *Zingiberis rhizoma*, *Ginkgo semen*, *Chuanxiong rhizoma*, *Trichosanthis fructus*, *Paeoniae radix*, *Psoraleae fructus*, *Sophorae flavescentis*, *Notoginseng radix* and *Angelicae sinensis* also showed good ACE2 inhibitory activity. However, the authors cautioned against indiscriminant usage of any of these medicines as they may have significant toxic effects at therapeutic concentrations. However, the study is useful as it predicted 106 compounds from TCMs that have potential in the treatment of COVID-19.

REFERENCES

1. Merarchi M, Dudha N, Das BC, Garg M. Natural products and phytochemicals as potential anti-SARS-CoV-2 drugs. *Phytotherapy Research*. 2021. DOI: 10.1002/ptr.7151.
2. Cock IE. An Opinion: Herbal Medicines may Provide a Means of Controlling the Covid-19 Pandemic. *Pharmacognosy Communications*. 2020;10(3):140-2.