



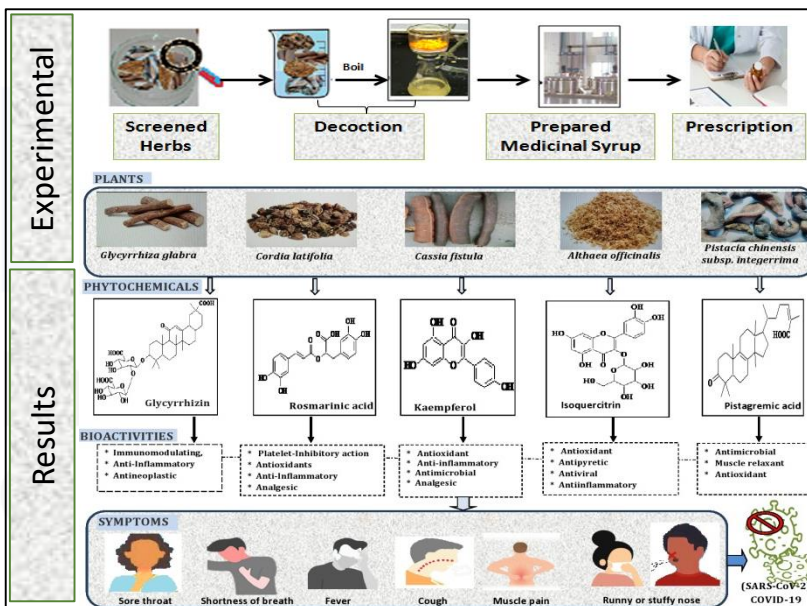
Under Investigation Symptom-based Development of Herbal Formulation for the Treatment of Covid-19

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Background and Objectives: Recently evolving global pandemic of Severe Acute Respiratory Syndrome Coronavirus 2 (SARS-CoV-2), with no clinically accepted medication yet, prompted us to investigate traditional medicinal plants for its cure [1]. Pneumonia, fever, dry cough, tiredness, shortness of breath, sore throat, chest pain, and loss of taste or smell are some of the most common symptoms observed in COVID-19 patients [1&2]. It is the modified Ayurveda formulation which has been applied on thousands of patients for the treatment of pandemic Influenza virus several decades ago in India. Moreover, the common symptoms observed between Influenza and COVID-19, provided baseline for this formulation. Hence, therapeutic effects of five miracle plants including *Pistacia chinensis subsp. integerrima* (J. L. Stewart ex Brandis) (galls), *Althaea officinalis* (roots), *Cassia fistula* (fruit), *Cordia latifolia* (fruit), and *Glycyrrhiza glabra* (roots) were investigated. These exhibit antiviral, immunomodulatory, immunostimulatory, analgesic, antimicrobial, antioxidant, and anti-inflammatory effects which may be due to the presence of several phytochemicals including polysaccharides, flavonoids, tannins, triterpenes such as pistagremic acid, Isoquercitrin, Kaempferol, Rosmarinic acid, Glycyrrhizin etc, in these plants [3-7].



Under investigation herbal preparation of five medicinal plants is a modified formulation, prescribed for pandemic Influenza virus patients several decades ago in India. These anti-oxidative herbs increase immunity against host cell of Corona virus [1,3-7]. Furthermore, rapid response of the under investigation modified formulation was also observed during clinical trials. Future investigations are recommended.

Conclusion: Herbs are one of the largest natural resources of medicine since inception with less or no side effects. In case of any disease emergence, the focus is to develop medicine from natural products with potential therapeutic effects. Hence, presently investigated herbal medicinal formulation will be a newly developed drug after proven clinical trials against Covid-19. Similarly, clinical trials and theoretical findings suggest that this under investigation formulation can be an effective herbal remedy for Covid-19 patients with immunomodulatory effects.

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