

Role of Natural Plant Products Against Hemagglutinin-esterase (HE) of Human Coronavirus

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Background: COVID-19 has spread worldwide and become a great cause of economic and social loss. Due to the non-availability of effective medicine/drug, its control has become a difficult task.

Objective: In the present study, the effect of some selected natural plant products was studied on the Hemagglutinin-esterase of the human coronavirus by performing molecular docking.

Methods: Molecular docking study for some selected natural plant products against Hemagglutinin-Esterase (HE) of human coronavirus was performed using the HEX 8.0.0 software.

Results: The free binding energy ranged from -298.14 to -161, with that of curcumin being the highest.

Conclusions: The results suggest that the natural plant products could act as possible anti-viral agents and may be used as natural therapeutic agents.

Keywords: Coronavirus, natural plant products, molecular docking, hemagglutinin-esterase, non-covalent interactions, protein-ligand.