# Activity of Gardenia sp. against COVID 19 through deactivation of RNA-dependednt RNA polymerase of COVID-19 (6VYO)

Satyashree Dash[1], Sitaram Swain[2]

[1]190705180104@cutm.ac.in

[2]Sitaram.swain@cutm.ac.in

Centurion University of Technology and Management, Odisha, India

**Abstract:** An in-silico study was performed to determine the activity of Gardenia sp. against COVID 19. Molecular docking using Biovia Discovery Studio was performed to identify the phytochemical responsible to deactivate RNA-dependednt RNA polymerase of COVID-19 (6VYO) enzyme. It was found that Genistein helped to prevent COVID 19.

**Introduction:** Gardenia sp. is known for its medicinal activities. Gardenia plants are known for its strong sweet scent of their flowers. Gardenia jasminoides (syn. G. grandiflora, G. Florida) is cultivated as a house plant. Its fruit is used as a yellow dye and used on fabric and food. Its fruits are also used in traditional Chinese medicine for their clearing, calming, and cooling properties.

The plant is classified as follows:

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| Kingdom | Plantae |
| Division | Tracheophytes |
| Class | Angiosperms |
| Order | Gentianales |
| Family | Rubiaceae |
| Genus | Gardenieae |
| Species | Gardenia |

Major phytochemicals present in the plant are:

a. Pelargonidin
b. Genistein
c. Genistein
d. Daidzein

One of the major enzymes required for the survival of the organism causing COVID 19 is RNA-dependednt RNA polymerase of COVID-19 (6VYO) enzyme. The objective of this work is to find the phytochemical that can deactivate the enzyme, thereby preventing the physiological activity of the organism.