

## ABSTRACT

### **Potential Plants as Antivirus Againsts Coronavirus Disease: An Effort for Searching Drug Candidate of COVID-19 (Literature Review)**

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COVID-19 is an infectious disease caused by the SARS-CoV-2 virus and causes acute respiratory infections. There is no specific treatment for this virus. Several plants and natural compounds that have biological activity, including antiviral agents. In this review, a literature search was carried out regarding the activity of plants and natural compounds that are active against the coronavirus. So that it is expected to have the potential to become an antiviral for COVID-19. Using the literature search method through a database, there are 20 literature on plants and natural compounds that have activity against SARS-CoV, MERS-CoV, and SARS-CoV-2. There are 29 plants that have activity against SARS-CoV, MERS-CoV, and SARS-CoV-2. with inhibitory mechanisms at the entry stage such as protein S and ACE2 receptors, and replication stages, such as inhibition of RdRp, main protease, 3CLpro, and PLpro. From the results of the literature search, the main protease, which includes 3CLpro and PLpro, is a mechanism of activity that mediated the affects in the three of those viruses. Some plants and compounds that are active against SARS-CoV and MERS-CoV may also provide activity against SARS-CoV-2 because of the similarity of the virus's inhibitory mechanisms. That medical plants are potential resources as candidate in drug development of COVID-19.

**Keywords:** Potential plant, Herbal medicine, Natural compound, SARS-CoV-2.