



Treatment of Ginger Plants That Are Very Useful in The Pandemic

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ABSTRACT

In early 2020, Indonesia was shocked by an outbreak of disease from Wuhan China, namely Corona Virus Disease 2019 (Covid-19). This virus invades the body by attacking the immune system. Plants that have good immunity are ginger. However, many still see it as a spice kitchen. To find out the content of ginger that is useful during the Covid-19 pandemic, a journal literature search was conducted using Google Scholar and Pubmet. The search was carried out in October 2021. The results obtained from a journal review, that ginger contains an active compound gingerol which acts as an anti-inflammatory agent oxidant.

INTRODUCTION

Covid-19 is a new disease that has become a pandemic, this disease must be watched out for because of its relatively rapid transmission, has a mortality rate that cannot be ignored, and there is no definitive therapy, WHO (2020). Primary signs are fever, cough, throat pain, nasal congestion, malaise, headache, and muscle pain. In addition, some problems are not accompanied by fever and symptoms are quite mild, Sherren, et al (2020).

The body's immune system is important to maintain in the covid-19 era like this time, in addition to consuming

adequate nutrition, regular rest, poly supplements containing vitamin C are a good source of antioxidants for consumption. One of the plants that is easily found and the market price is quite economical, namely ginger rhizome has a fairly high antioxidant content, Allah SWT says in the Al-Quran letter Al Insan verse 17 which explains about ginger. Namely: "And there they were given a glass of drink mixed with ginger." (QS. Al-Insan 76: Verse 17)

From various research results, Leach (2017) concluded that ginger is very effective in preventing or curing various

diseases because it contains gingerol, which is a powerful anti-inflammatory and antioxidant. Many researchers claim that ginger has high antioxidant properties because it contains gingerol and other active chemical compounds that are beneficial to the body. Due to the lack of knowledge around ginger. Ginger has anti-histamine properties that are commonly used to cure stress, allergies, fatigue, and headaches, overcome throat disorders, nausea during seasickness, and treat the side effects of chemotherapy. In addition, ginger also has anti-inflammatory properties making it good for treating arthritis and various muscle disorders, lowering bad cholesterol levels, and maintaining heart health.

METHOD

The literature search was conducted in October 2021. The sites used were Google Scholar, and Pubmet. The keywords used to find journal sources were Gingers, Covid-19, which were used to find the source of the Covid-19 Journal, ginger, body immunity, gingerol. Literature inclusion criteria are scientific journals and reviews, articles, publication years from the last 5 years, 2017-2021. Literature exclusion criteria are publication years below 2017. The literature used as a source amounted to 6 journal publications

RESULTS AND DISCUSSION

Covid-19 is a group of viruses that come from the Orthocrona Virinae sub-family in the coronaviridae family and the Nidovirales order (Yunus and Rezki, 2020). The coronavirus infects humans by spreading through saliva droplets from the mouth of an infected person due to coughing or sneezing. Which then enters

the body of people who are nearby through the mouth, nose and eyes. The virus then enters the respiratory tract and the mucous membrane at the back of the throat attaches to a receptor in the cell and begins to develop there. The main symptoms are fever, cough and sore throat. Nasal congestion, malaise, headache and muscle pain. In addition, some cases are found to be accompanied by no fever and relatively mild symptoms. (Sherren, et all, 2020).

Prevention of Covid-19 exposure is widely practiced, one of which is by drinking herbal drinks to increase the body's immunity, one of the herbal drinks consumed is a mixture of ginger, lemon and honey. In this journal review, we will review jah plants that are useful during the Covid-19 pandemic. As a traditional medicinal ingredient, ginger can be used alone or combined with other herbal medicinal ingredients that have a mutually reinforcing and complementary function. (Nala, 1992: Santoso, 2008) According to (Ware, 2017). Ginger is utilized as herbal medicine because it contains essential oils with active chemical compounds such as: zingiberin, caffer, lemonin, borneol, shogaol, sineol, feilandren, zingiberol, gingerol and zinggeron which are efficacious to prevent and treat various diseases (Goulart, 1995; Readers Digest, 2004: Sudewo, 2006; Santoso, 2008).

The anti-inflammatory and antioxidant contents found in ginger are gingerol, beta-carotene, capsaicin, caffeic acid (Ware, 2017). From various research results (Leach, 2017) concluded that ginger is very effective for preventing or curing various diseases because it contains gingerol which is a very strong anti-inflammatory and antioxidant. Antioxidants are molecules that protect body cells from free radical

damage. Anti-inflammatories are molecules that reduce inflammation, so they can relieve pain and reduce fever. Gingerol is a compound contained in ginger oleoresin that has a pale yellow color and is labile. Gingerol gives fresh ginger its pungent flavor and is classified as a phenolic compound. Gingerol is highly susceptible to thermal decomposition. The compound 6-gingerol is reported to have antioxidant, anti-inflammatory and antioxidant properties. gingerol compounds contain antioxidants reinforced in the discussion (Ali, Blunden. Tanira and Nemmar, 2008; McgGee, 2007; Piasad and Tyagi 2015).

The most important components of ginger include zingiberene, bisabolene - farnasene, sesquiphellandrene, and curcumene, while phenolic compounds include gingerol, paradols and shogaol. The specific odor of ginger is related to zingiberene and bisabolene, while the pungent taste is due to the volatile oils gingerol (23-25%) and shogaol (18-25%). In addition to these components, amino acids, crude fiber, protein ash, phytosterols, vitamins (e.g. nicotinic acid and vitamin A) and minerals are also present in ginger. Other gingerol or shogaol-related compounds (1-10%) that have been reported in ginger rhizomes include 6-paradol, 1-dehydrogingerdione, 6-gingerdione and 10-gingerdiol and diary 1 heptanoids. The long history and beneficial human use of ginger has prompted clinical trials to scientifically assess the effectiveness of ginger as an adjuvant therapy or as a complementary and alternative medicine in a number of diseases especially gastrointestinal diseases (Lete and Allue, 2016).

CONCLUSIONS AND RECOMMENDATIONS

Maintaining immune health is very important during this pandemic, because the covid-19 virus infects the immune system. The purpose in reviewing this journal is to find out the content in ginger to increase immunity, and it can be concluded from various research journals that ginger has the active substance gingerol which is useful as an antioxidant.

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