Thailand Clears Use of Herbal Medicine for Covid-19 Treatment

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Thailand’s health ministry approved the use of a herbal plant extract to treat early stages of Covid-19 as a pilot program amid a flareup in the coronavirus outbreak in the Southeast Asian nation.

Andrographis Paniculata, commonly known as green chiretta, will serve as an alternative treatment to reduce the severity of the outbreak and cut treatment costs, the ministry said in a statement Wednesday. The treatment will be available in five state-owned hospital initially, it said.

Thailand reported 250 new cases on Wednesday, taking the nation’s total to almost 7,000, and a government official said the rate of increase in local transmissions was alarming and urged people to stay at home to prevent the virus from spreading further. The government has also banned large gatherings in high-risk areas, said Taweesilp Witsanuyotin, a spokesperson for the national Covid-19 response center.

- The herbal treatment will be on a voluntary basis for those in the 18-60 age group with minor symptoms and should be within 72 hours of confirming infections.
- The extract from the plant, known as Fah Talai Jone in Thai, can curb virus and reduce severity of inflammation, ministry says citing studies.
- Human trials showed patient conditions improved within three days of the treatment without side effects if the medicine is administered within 72 hours of testing positive.
Andrographis paniculata, commonly known as creat or green chiretta,[2] is an annual herbaceous plant in the family Acanthaceae, native to India and Sri Lanka. Other common names for the plant include King of Bitter and hampedu bumi (Malay).[3]

It is widely cultivated in Southern and Southeastern Asia, where it has been traditionally been believed to be a treatment for bacterial infections and some diseases. Mostly the leaves and roots were used for such purposes. The whole plant is also used in some cases.[4]

Description

The plant grows as an erect herb to a height of 30–110 cm (12–43 in) in moist, shady places. The slender stem is dark green, square in cross-section with longitudinal furrows and wings along the angles. The lance-shaped leaves have hairless blades measuring up to 8 cm (3.1 in) long by 2.5 cm (0.98 in). The small flowers are pink, solitary, arranged in lax spreading racemes or panicles. The fruit is a capsule around 2 cm (0.79 in) long and a few millimeters wide.[5] It contains many yellow-brown seeds. The seeds are subquadrate, rugose and glabrous. The flowering time is September to December.[6]
**Cultivation**

The plant does best in a sunny location. The seeds are sown during May and June (northern hemisphere). The seedlings are transplanted at a distance of 60 cm (24 in) x 30 cm (12 in).

**Medicine use**

*A. paniculata* has been used in Siddha and Ayurvedic medicine, and is promoted as a dietary supplement for cancer prevention and cure. There is no evidence that it helps prevent or cure cancer.

In the traditional medicine of India, *A. paniculata* has also been used for jaundice therapy.

A 2012 review found that *A. paniculata* extracts could inhibit expression of several cytochrome C enzymes and thus interfere with metabolism of other pharmaceuticals. A 2019 review finds that *A. paniculata* compounds have poor solubility and relatively low potency, and that a semi-synthetic injectable derivative can cause sometimes life-threatening allergic reactions.

A 2017 meta-analysis evaluating *Andrographis paniculata* to treat respiratory tract infections was inconclusive because the trials reviewed were of poor quality.

A 2020 study found that Andrographis permitted chemosensitization of chemosensitive colorectal cancer cells. Two major pathways were altered by the Andrographis. One is the ferroptosis pathway, the other is the β-catenin/Wnt-signaling pathway.

Amid flareup of COVID-19 pandemic outbreak in December 2020 in Thailand, the country's health ministry had approved the usage of the plant extract for a pilot and alternative treatment program for early stages of the coronavirus infection to reduce the severity of the outbreak and cut treatment costs. The treatment was initially made available in five state-owned hospital on a voluntary basis for those in the age group of 18 to 60 years old with minor symptoms and should be within 72 hours of confirmed infections. The ministry cited that the plant extract can curb virus and reduce severity of inflammation, of which at the time, human trials showed patient conditions improved within three days of the treatment without side effects if the medicine is administered within the said confirmed infections hours.

**Chemistry**

*Andrographolide* is the major constituent extracted from the leaves of the plant and is a bicyclic diterpenoid lactone. This bitter principle was isolated in pure form by Gorter (1911). Systematic studies on chemistry of *A. paniculata* have been carried out.

**References**

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