Vegan Media Formula for Cordyceps Militaris Cultivation and Medicinal Cordyceps Tea

Cordyceps militaris, is a fungus that naturally grows on certain caterpillar in high land of Himalayan Plateau. It is widely used as functional food and traditional medicine in China and South Asia as it contains hundreds of bioactive substances. Contrary to Ophiocordyceps sinensis and other Cordyceps, C. militaris can be cultured artificially and reproducibly in the laboratory. However, as caterpillar fungus, the composition of culture media always contain worms or larvae. To produce C. militaris for vegan, vegetarian, Muslim and also ordinary people who not feel comfortable to have worms or larvae related products, we formulated the culture media called “vegan media formula” by using plant proteins as nitrogen source instead of proteins from worms or larvae. In addition, we also improved the cultivation processes to save electricity and labor costs by shorten the incubation period and harvest C. militaris fruiting bodies within 30-45 days after light exposure. The levels of cordycepin and adenosine in vegan C. militaris are as high as cordycepin and adenosine in worms or larvae-C. militaris

Potential Applications

The vegan C. militaris fruiting bodies obtained from the vegan media formula can serve all people in society; the ordinary people, the vegan, the vegetarian and the Muslim (as it can be halal-certifiable). In Oriental Medicine, C. militaris is used to boost the immune system, act as anti-inflammatory, help control blood sugar, and nourish kidney function. The potentials of this medicinal mushroom are gearing up the present herbal treatments. Dry fruiting bodies can be used directly as health benefit tea or dietary supplement. In addition, the active ingredients of C. militaris can be used in modern systems of medicine.

Customer Benefits

New therapeutic approaches with biological agents of C. militaris related products are currently on trial for the treatment of allergic rhinitis, hyperlipidemia, diabetes, and hypertension.

Technology Features & Specifications

The invention relates to a novel media formulation to support the growth of C. militaris, in particular, plant proteins are used as a sole nitrogen source for cultivation. The invention also relates to processes of artificial cultivation of C. militaris that mature fruiting bodies can be harvested within 30-45 days. The fruiting bodies obtained from current invention are considered as vegan food that can be used as health benefit tea, dietary supplements and/or medicine.

For more information on technologies we have to offer, please visit our website at https://www.ipi-singapore.org or enquire at techscout@www.ipi-singapore.org