

## Effect of freeze drying and hot air drying methods on quality of cordycepin production

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### Abstract

This study determined the effect of drying methods including hot air drying and freeze drying on the quality of cordycepin production from *Cordyceps militaris*. The fruiting bodies and mycelium of *C. militaris* were used as the raw material. For hot air drying was performed at 55 °C for 24 hrs. Whereas the freeze drying was carried out under vacuum at 140 L min<sup>-1</sup> for 48 hours. The bioactive compound extracted from dried powder of *C. militaris* from two drying methods was investigated. The results showed that both cordycepin and adenosine extracted from freeze drying sample had higher value than those of extracted from hot air dried sample. The bioactivities of *C. militaris* extract were investigated. The results revealed that the antioxidant activity and also total phenolic contents of *C. militaris* extract prepared from freeze drying had higher value than that of extracted from hot air drying. However, most of *C. militaris* production performed using hot air drying to dry sample because of its low cost technique.

**Keyword:** *C. militaris*, Cordycepin, Hot air drying, Freeze drying