

Study reveals anti-cancer properties of caterpillar fungus

Chinese scientists announced Tuesday the discovery of the biosynthesis mechanism of cordycepin, a cancer-resisting extraction from caterpillar fungus.

Cordycepin was normally extracted from the fungus *cordyceps militaris* but cannot be produced by regular *cordyceps sinensis*, according to a statement from a Shanghai-based research team.

Their research found that biosynthesis of cordycepin is coupled with pentostatin production by a single gene cluster.

Pentostatin is currently used as an anticancer chemotherapeutic drug.

The study demonstrated that this coupling is an important point of metabolic regulation where pentostatin safeguards cordycepin from deamination.

Deamination will happen when cordycepin reaches self-toxic levels in fungus, and there may be potential harm if people take too much cordycepin, said the statement.

An article about their findings has been published online by Cell Chemical Biology.