

# **Prevention of Cellular Oxidative Damage by an Aqueous Extract of *Anoectochilus formosanus***

汪稜芳;施純明;鄭可大;林俊茂

**Wang LF;Lin CM;Shih CM;Chen HJ;Su B;Tseng**

**CC;Gau BB;Cheng KT**

摘要.

## **Abstract**

Abstract: *Anoectochilus formosanus* (AF) is a popular folk medicine in Taiwan whose pharmacological effects have been characterized. In this work we investigated the antioxidant properties of an aqueous extract prepared from AF. The AF extract was capable of scavenging H<sub>2</sub>O<sub>2</sub> in a dose-dependent manner. We induced oxidative stress in HL-60 cells, either by the addition of hydrogen peroxide (H<sub>2</sub>O<sub>2</sub>) or by the xanthine/xanthine oxidase reaction. Apoptosis caused by oxidative damage was displayed by DNA fragmentation on gel electrophoresis, and the apoptotic fraction was quantified with flow cytometry. The cell damage induced by oxidative stress was prevented by the plant extract in a concentration-dependent manner. Furthermore, the proteolytic cleavage of poly(ADP-ribose) polymerase during the apoptotic process was also inhibited by AF extract. Our results provide the basis for determining an AF extract to be an antioxidant.