Isolation and Identification of Compounds Present in Rhizomes of *Paris axialis* H. Li and Study of Their Cytotoxic Effects

Xianxiao HUANG ^{1,2}, Wenyuan GAO ^{1*}, Shuli MAN ¹, Ying GAO ¹, Luqi HUANG ³, & Changxiao LIU ⁴

 ¹ School of Pharmaceutical Science and Technology, Tianjin University, Tianjin 300072, P. R. China,
² Wilmar (Shanghai) Biotechnology Research & Development Center Co.,Ltd, Shanghai 200137, P.R. China,
³ Institute of Chinese Materia Medica, China Academy of Chinese Medicinal Science, Beijing 100700, P.R. China
⁴ Tianjin Institute of Pharmaceutical Research, Tianjin 300193, P.R. China

SUMMARY. Ten compounds were isolated from the rhizomes of Paris axialis H. Li (PA). Based on spectral data, the isolated compounds were identified as Diosgenin (1), Paris saponin V (2), Paris saponin VI (3), Paris saponin I 4), Paris saponin H (5), Paris saponin II (6), Paris saponin VII (7), luteolin (8), luteoloside (9), isorhamnetin-3-O- α -L-rhamnopyranosyl(1 \rightarrow 2)- β -D-glycopyranoside (10). Their cytotoxicity on LA795 cells was evaluated. Paris saponins and flavonoids have synergistic anti-tumor effect on LA795 cells.

KEY WORDS: Cytotoxicity, Flavonoids, LA795 cells, Paris axialis H. Li, Steroid saponins.

* Author to whom correspondence should be addressed. E-mail: pharmgao@tju.edu.cn