



Structure-Activity Relationship Study of Twelve Compounds from *Paris polyphylla* Smith var. *pubescens*

Xianxiao HUANG¹, Wenyuan GAO^{1*}, Shuli MAN¹, Ying GAO¹,
Luqi HUANG² & Changxiao LIU³

¹ School of Pharmaceutical Science and Technology, Tianjin University, Tianjin 300072, P. R. China,

² Institute of Chinese Materia Medica, China Academy of Chinese Medicinal Science,
Beijing 100700, P. R. China

³ Tianjin Institute of Pharmaceutical Research, Tianjin 300193, P. R. China

SUMMARY. Twelve compounds were isolated from the rhizoma of *Paris polyphylla* Smith var. *pubescens* Handel-Mazzetti. Based on spectral data, the isolated compounds were identified as stigmasterol (1), β -Ecdysterone (2), Diosgenin (3), Ophiopogonin C' (4), Diosgenin-3-O- α -L-arabinofuranosyl(1 \rightarrow 4)- β -D-glucoside (5), Dioscin (6), Paris saponin I (7), Paris saponin II (8), Pennogenin-3-O- α -L-arabinofuranosyl (1 \rightarrow 4)- β -D-glucoside (9), Paris saponin VI (10), Pennogennin-3-O- α -L-arabinofuranosyl(1 \rightarrow 4)-[α -L-rhamnopyranosyl(1 \rightarrow 2)]- β -D-glucoside (11) and Paris saponin VII (12). Their cytotoxicity and anti-migration on mouse B16 melanoma cells were evaluated.

KEY WORDS: Anti-migration, Cytotoxicity, Mouse B16 melanoma cell, *Paris polyphylla* var. *pubescens*, Steroid saponin.

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