

5th International Conference and Exhibition onPHARMACOGNOSY, PHYTOCHEMISTRY
& NATURAL PRODUCTS

July 24-25, 2017 Melbourne, Australia

An efficient synthesis of a bioactive benzenoid derivative from the mycelium of *Antrodia camphorate* and its anti-viral activityShu-Han Yang^{1,2}, Jyuan-Siou Lin^{1,3}, Shu-Hao Lee¹, Chang-Jer Wu³ and Ching-Kuo Lee²¹Power Nature Company, Taiwan²Taipei Medical University, Taiwan³National Taiwan Ocean University, Taiwan

Antrodia Camphorata (AC), a highly valued polypore mushroom native only to Taiwan, has been traditionally used as a medicine for the treatment of liver-related cancer and inflammation syndromes. Compound S3 was isolated from the mycelium of AC. In this study we found that S3 displayed potent anti-influenza A virus activity. Influenza A (H₁N₁) virus is the subtype of influenza A virus that was the most common cause of human influenza (flu) in 2009. Now the influenza A (H₁N₁) treatment is done by Tamiflu®. However, Tamiflu® has a lot of side effects, for example users may have mental illness symptoms. The cytotoxicity evaluation of S3 against baby hamster kidney cell lines (BHK-21) showed that S3 was slightly higher active than Tamiflu® (cell viability still has more than 80%), but S3 treatment effect better than Tamiflu®. In addition, the animals have no adverse effects after long-term use S3. It was a potent inhibitor of influenza A (H₁N₁) virus, with higher activity than the reference compound Tamiflu®. However, the content of S3 is rarely found in the mycelium of AC. Synthesis of the key chemical S3 compound in our laboratory was done through the AlCl₃ followed by demethylation. The yield was 23% in one step. This paper offers the first report of the anti-influenza A virus activity by S3. Moreover the key benzenoid component S3 was prepared only in one step.

Biography

Shu-Han Yang has completed her Master's degree from National Taiwan Normal University. She is an Assistant Researcher at Research and Development Department of Power Nature Company and School of Pharmacy of Taipei Medical University. She has published 1 paper in reputed journal.

a78322003@hotmail.com

Notes: