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## CHEMICAL CONSTITUENTS AND ANTIBACTERIAL PROPERTIES OF *INDOCALAMUS LATIFOLIUS* MCCLURE LEAVES THE PACKAGING MATERIAL FOR “ZONGZI”

**Hang Xun**

International Centre for Bamboo and Rattan, China

**Z**ongzi, which is believed to have a history of more than 2000 years, is a type of famous Chinese snack that is also popular in many Asian countries. It is made of glutinous rice and wrapped in the large flat bamboo leaves of *Indocalamus latifolius* McClure. Zongzi has been characterized by a long shelf life since ancient times. In this research, we examined the phytoconstituents of *I. latifolius* McClure leaves in detail and their antibacterial activities against two gram positive and two gram negative bacterial strains. Four new compounds, along with six known compounds were isolated from *I. latifolius* McClure leaves. The structures and relative configurations of the compounds were determined by detailed spectroscopic analysis. All of the isolated compounds were screened for their antibacterial activities *in vitro*. The results indicated that apigenin 6-C- $\alpha$ -L arabinopyranosyl-8-C- $\beta$ -D-glucopyranoside and apigenin 7-O, 8-C-di-glucopyranoside have antibacterial

activities against four bacterial strains. Since ancient times, the leaves of *I. latifolius* McClure have been used as a packaging material for food and presently, they still play a unique role in producing zongzi in China. The identification of the antibacterial compounds in the leaves of *I. latifolius* McClure is important for helping us to understand the long shelf life of zongzi as well as for exploring the potential of *I. latifolius* McClure leaves as a natural, healthy and eco-friendly alternative packaging material for other applications.

### Biography

Hang Xun is a Doctoral candidate in International Centre for Bamboo and Rattan, China. His research works during the Doctoral study include: Separation and identification of secondary metabolites from bamboo, and screening the bio-activities of related natural products.

xunhang@icbr.ac.cn