Feeding Stimulant in *Cinnamomum camphora* for the Common Bluebottle, *Graphium sarpedon nipponum* (Lepidoptera: Papilionidae)

Jing Li, Ryu Wakui, Masanori Horie, Yoshichika Nishimura, Yoshihide Nishiyama, Yasunori Ikeno, Shin-ichi Tebayashi, and Chul-Sa Kim*

Department of Agriculture, Faculty of Agriculture, Kochi University, B200 Monobe, Nankoku 783-8502, Japan. Fax: +81-88-864-5186. E-mail: cs-kim@kochi-u.ac.jp

* Author for correspondence and reprint requests

Z. Naturforsch. **65 c**, 571–576 (2010); received April 22/July 1, 2010

The acceptance of camphor tree (*Cinnamomum camphora*) as a host plant for the larvae of common bluebottle (*Graphium sarpedon nipponum*) was explained by the presence of feeding stimulants in the leaves. When the active methanol extract of *C. camphora* leaves was separated into hexane and water layers, both layers showed high feeding activities for the larvae of *G. sarpedon nipponum.* Bioassay-guided fractionation of the hexane layer resulted in the isolation of a highly active compound, which was identified as *Ŭ*-linolenic acid by nuclear magnetic resonance spectrometry and gas chromatography-mass spectrometry.

Key words: Feeding Stimulants, *Graphium sarpedon nipponum*, *Cinnamomum camphora*, *Ŭ*-Linolenic Acid