Sex Pheromone of the Carpenterworm, *Holcocerus insularis* (Lepidoptera, Cossidae)

Zhang Jintong, Han Yan and Meng Xianzuo*

Institute of Zoology, Chinese Academy of Sciences, Beijing, 100080, China. Fax: (86-10) 62565689. E-mail: meng xz@panda.ioz.ac.cn

* Author for correspondence and reprint requests

Z. Naturforsch. **56 c**, 423–429 (2001); received January 18/January 28, 2001

Sex Pheromone, (Z)-3-Tetradecenyl Acetate, *Holcocerus insularis*

By means of thin-layer chromatography (TLC), electroantennogram (EAG), gas chromatography (GC), gas chromatography-mass spectrometry (GC-MS) and field tests, (Z)-3-tetradecenyl acetate(Z3-14:Ac), (E)-3-tetradecen-1-ol(E3-14:OH), and (Z)-3-tetradecen-1-ol(Z3-14:OH) at a ratio of 51:39:10 were identified from the female sex pheromone gland extracts of the carpenterworm, *Holcocerus insularis* Staudinger (Lepidoptera, Cossidae). The average amounts of Z3-14:Ac, E3-14:OH and Z3-14:OH in a single sex pheromone gland of calling moth were 7.29±2.72 ng, 5.72±2.43 ng and 1.44±0.56 ng, respectively. This is the first time that Z3-14:Ac was identified as a component of lepidopteran sex pheromone. Traps baited with rubber septa impregnated with Z3-14:Ac (500 µg / septum) were more effective than the traps baited with virgin female. The addition of the E3-14:OH and Z3-14:OH to rubber septa baited with Z3-14:Ac did not modify *H. insularius* male attraction, but E3-14:Ac slightly enhanced trap catch.