4-Methyl-1-hepten-3-one, the Defensive Compound from
Agathemera elegans (Philippi) (Phasmatidae) Insecta

Guillermo Schmeda-Hirschmann

Laboratorio de Química de Productos Naturales, Instituto de Química de Recursos Naturales, Universidad de Talca, Talca, Chile. Fax: + 5671200448. E-mail: schmeda@utalca.cl

Z. Naturforsch. 61c, 592–594 (2006); received January 27, 2006

Insects of the genus Agathemera (Phasmatidae) live in the Chilean Andes over 1500 m above sea level. On disturbing, the insects release a spray that can cause temporary blindness in humans. Very little is known on the composition of chemicals used for defense by South American phasmids. Here we show that both female and male defensive secretion of Agathemera elegans is made up of 4-methyl-1-hepten-3-one. The compound is reported for the first time as a natural product.

Key words: Agathemera elegans, Phasmatidae, Defense Secretion, 4-Methyl-1-hepten-3-one