A New Benzo-γ-pyran Derivative Isolated from Propolis

Tetsuya Matsuno^a, Masahiro Saito^b, Yasuyuki Matsumoto^b and Junji Morikawa^b

^a Institute of Cancer Research, Columbia University, 701 West 168th Street, New York, NY 10032, USA

^b Eiken Chemical Co., Ltd. 1–33–8 Hongo, Bunkyo-ku, Tokyo 113, Japan Z. Naturforsch. **53 c**, 1037–1039 (1998); received July 15/September 14, 1998

Propolis, Benzopyran Derivative, Artepillin C, Cytotoxicity

The methanol extract of Brazilian propolis was fractionated by HPLC, based on human hepatocellular carcinoma (HuH 13) cell cytotoxicity assay. A new benzo-γ-pyran derivative (PM-3) with a molecular formula of C₁₉H₂₂O₃ (MW: 298.38) was isolated. The structure of this colorless compound was determined as 3-[2-dimethyl-8-(3-methyl-2-butenyl) benzopyran]-6-propenoic acid. This compound was chemically synthesized by cyclisation of artepillin C (3-[4-hydroxy-3,5-bis (3-methyl-2-butenyl) phenyl]-2-propenoic acid).

Reprint requests to Dr. T. Matsuno. Fax: (212) 305-6889. E-mail: matsuno@i-2000.com