

SYNTHESIS OF BOTH THE ENANTIOMERS OF 2,5-DIMETHYL-2-ISOPROPYL-2,3-DIHYDROFURANE,
THE SEX PHEROMONE OF HYLECOETUS DERMESTOIDES L.

Takashi Ebata and Kenji Mori*

Department of Agricultural Chemistry, The University of Tokyo, Tokyo 113, Japan

2,5-Dimethyl-2-isopropyl-2,3-dihydrofuran 1 is a new cyclic enol ether identified as a sex pheromone of Hylecoetus dermestoides L., a polyphagous beetle in middle European forests.

Both the enantiomers of the pheromone were synthesized starting from a single epoxy alcohol 3 utilizing its inherent molecular symmetry. The epoxide 3 was readily obtainable by the Sharpless asymmetric epoxidation of an allylic alcohol 2.

