C. L. HUGELSHOFER, T. MAGAUER* (LUDWIG-MAXIMILIANS-UNIVERSITY MUNICH, GERMANY)

A General Entry to Antifeedant Sesterterpenoids: Total Synthesis of (+)-Norleucosceptroid A, (–)-Norleucosceptroid B, and (–)-Leucosceptroid K

Angew. Chem. Int. Ed. **2014**, *53*, 11351–11355.

Category

Synthesis of Natural Products and Potential Drugs

Key words

sesterterpenoids

antifeedants

leucosceptroids

SYNFACT
of the month

Significance: The target compounds represent a family of sesterterpenoids with antifeedant activity against a variety of plant-feeding insects and pathogens. Their potential application in plant protection renders them highly interesting targets for total synthesis and biological profiling.

Comment: The authors employed an interesting aldol-type condensation of dilactol **F** en route to **G**. **H** was subjected to a sequence including epoxidation followed by aluminum-mediated opening leading to the required *syn*-configured species **I**, which was elaborated into the unnatural enantiomers of norleucosceptroids A, B, and K.

SYNFACTS Contributors: Erick M. Carreira, Matthias Westphal
Synfacts 2014, 10(12), 1233 Published online: 18.11.2014
DOI: 10.1055/s-0034-1379399; Reg-No.: C06414SF