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Total Syntheses of Scabrolide A and Yonarolide
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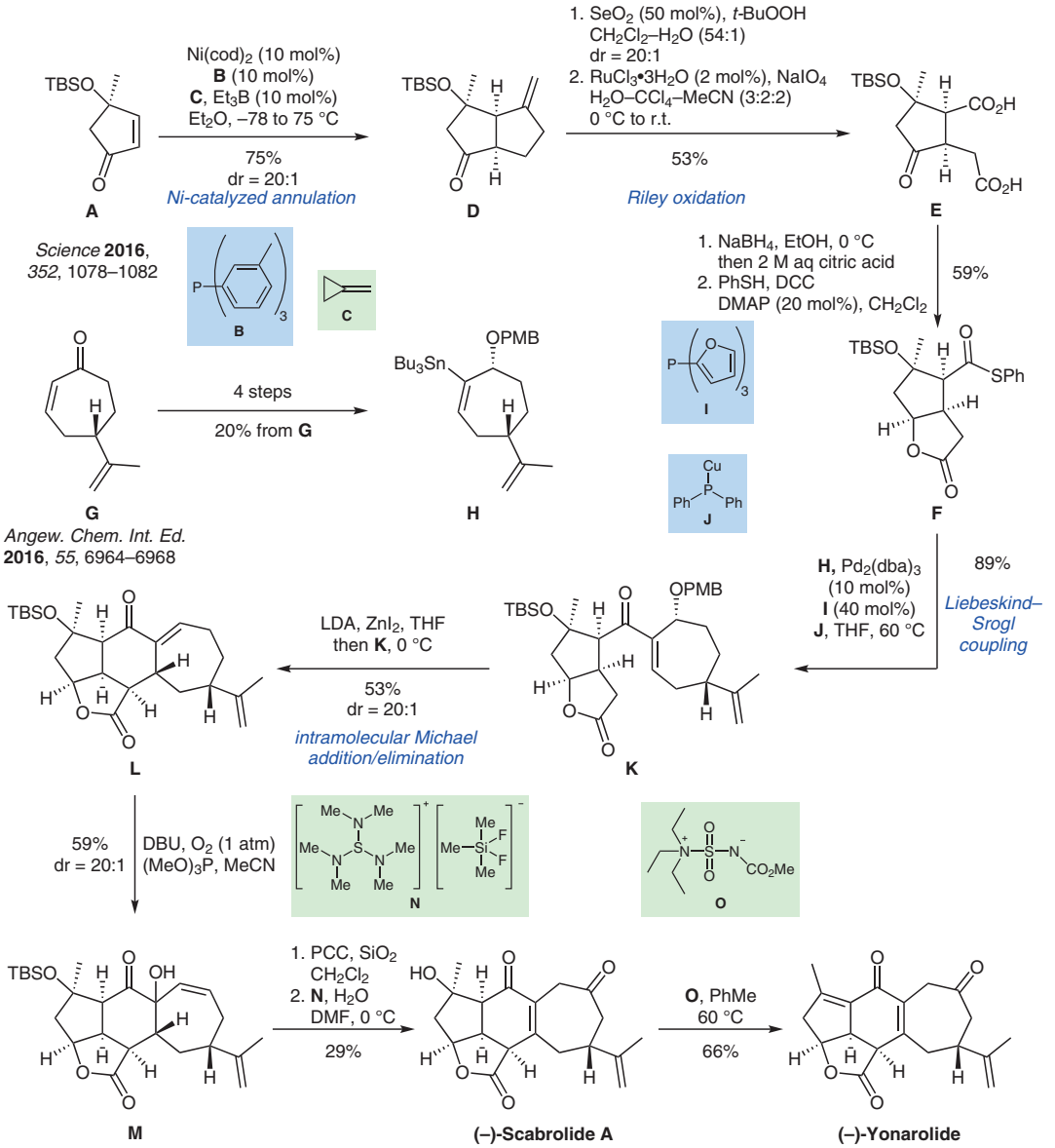
Syntheses of (–)-Scabrolide A and (–)-Yonarolide



Significance: Sarlah and co-workers report the total syntheses of (–)-scabrolide A and (–)-yonarolide, two norcembranoid terpenoids. The natural products feature a 5/6/7-fused carbocyclic ring system and an additional γ-lactone.

Comment: Bicyclic lactone **F** is accessed by Ni-catalyzed annulation using cyclopropane **C** and subsequent fragmentation. The two building blocks **F** and **H** were fused in a Liebeskind–Srogl coupling. An intramolecular Michael addition elimination cascade using a zinc-amido base furnishes enone **L**.

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Category
Synthesis of Natural Products

Key words
(–)-scabrolide A
(–)-yonarolide
norcembranoid terpenoids
Ni-catalyzed annulation
Riley oxidation
Liebeskind–Srogl coupling
intramolecular Michael addition/elimination

Synfact of the Month

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