Total Synthesis of (+)-Mannolide B
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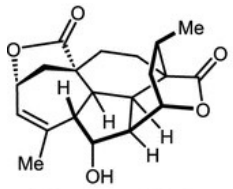
cephalotaxus diterpenoid

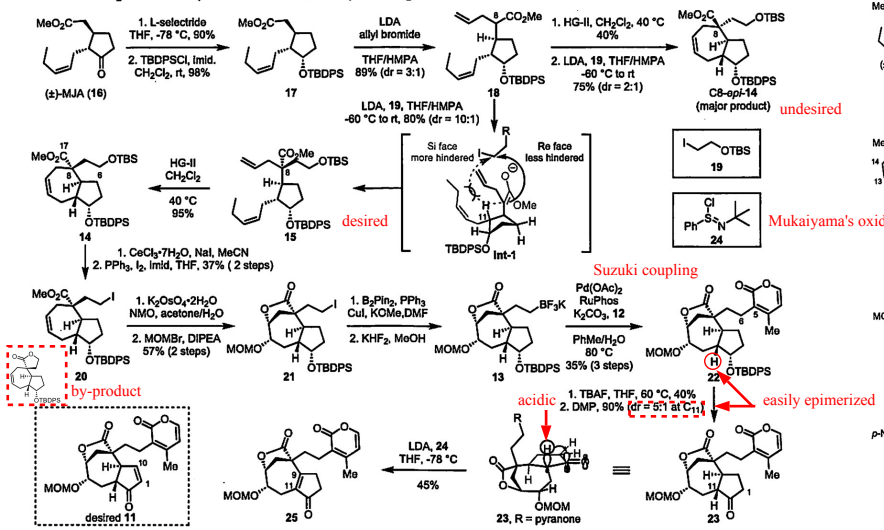
MJA (16) has been widely used in the perfume industry. However, its



(+)-mannolide B

- 5/7/5/6/6/6-Fused hexacyclic scaffold
- 2 Bridged-lactone moieties
- 10 Stereocenters: 9 contiguous
- 2 Quaternary carbon centers
- *First total synthesis*

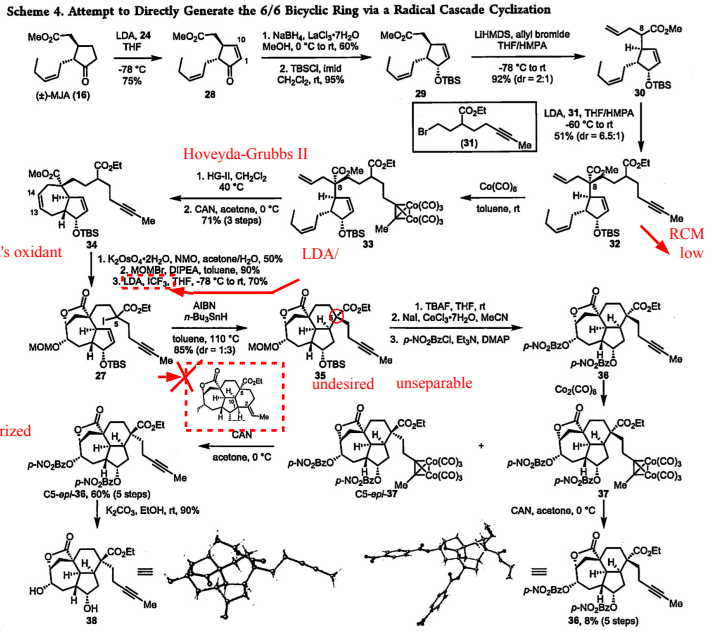
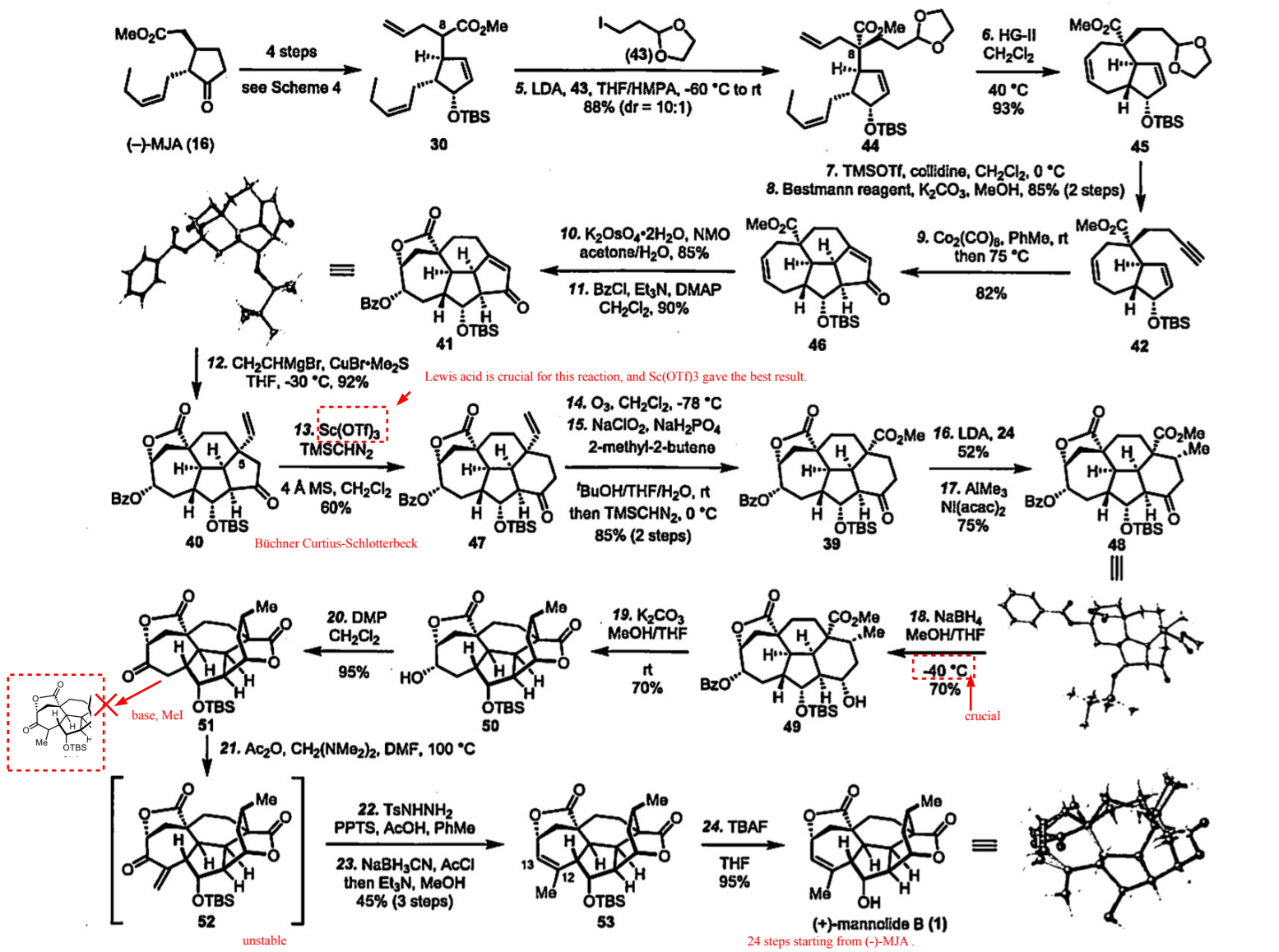
Scheme 2. Attempt to Directly Generate the 6/6 Bicyclic Ring via an Intramolecular Diels–Alder Reaction



the conversion of cyclopentene 30 compound 11was not conducted.

Given a radical mechanism might be involved in the conversion of alkyl iodide 21 to the corresponding pinacol boronic ester,

Scheme 4. Attempt to Directly Generate the 6/6 Bicyclic Ring via a Radical Cascade Cyclization



Scheme 6. Total Synthesis of (+)-Mannolide B (1)