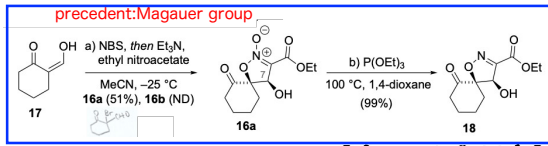
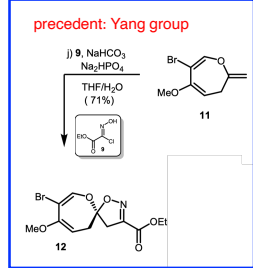


bromotyrosine-derived spiroisoxazoline alkaloid

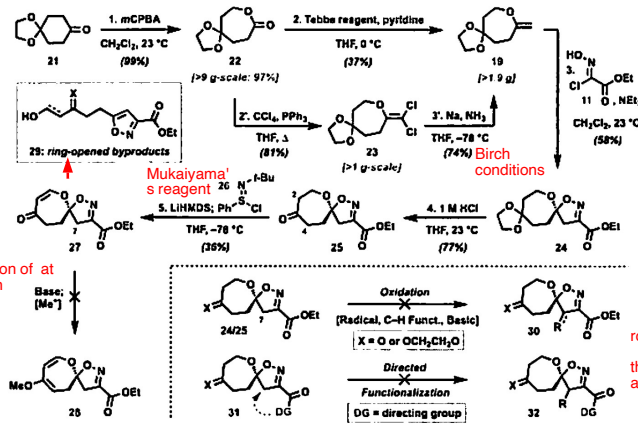


a Henry reaction/cyclization/reduction



preferential deprotonation at C-7 position

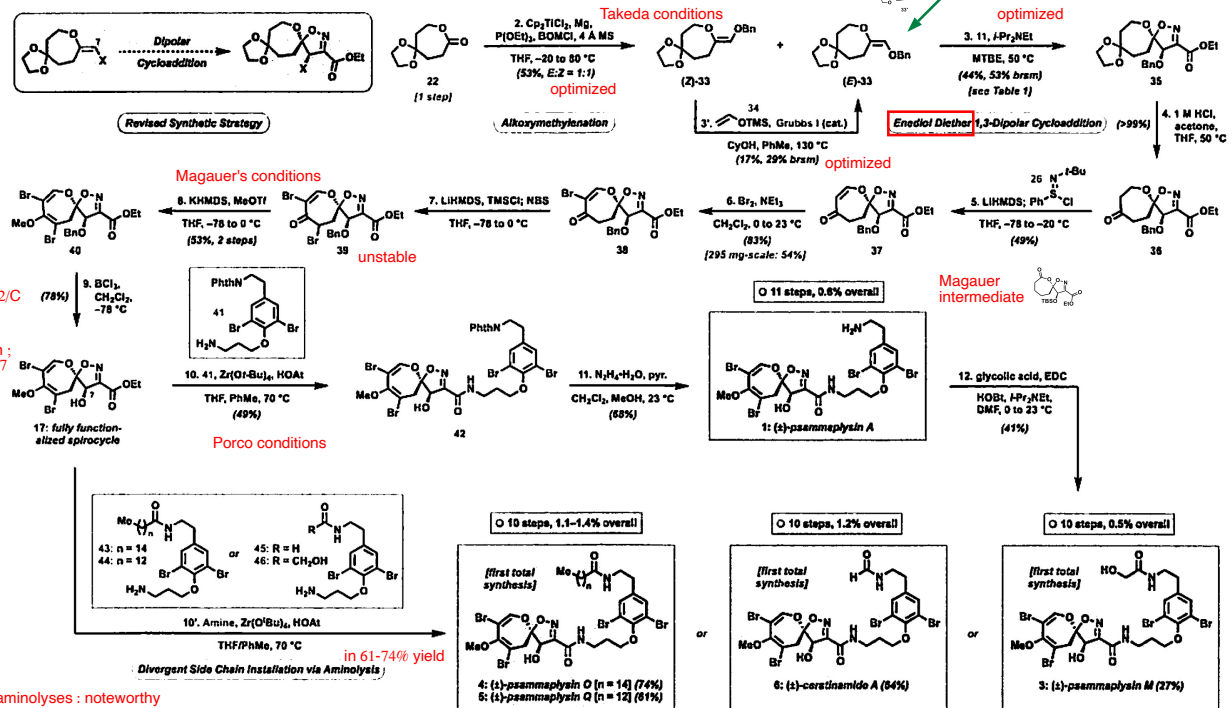
Scheme 1. Initial Synthetic Investigations toward the Psammapplyns via Nitrile Oxide Dipolar Cycloaddition



routinely obtained ring-opened products (e.g., 29)

the strain inherent in the oxepane ring and the driving force for aromatization to the isoxazole.

Scheme 2. Divergent Total Syntheses of Several Psammapplyns via Dipolar Cycloaddition of an Enedial Diether Dipolarophile and Direct Aminolytic Side Chain Installation



H₂/Pd(OH)₂/C
 unsuccessful
 prolonged reaction;
 epimerization of C7

Porco conditions

10: Amine, Zr(O^tBu)₄, HOAc

Divergent Side Chain Installation via Aminolysis

direct aminolyses: noteworthy

Asymmetric Synthesis of (-)-Psammapplysin A

Birman group's organocatalytic
 acylation with (+)-BTM

chiral auxiliary-based
 approaches unsuccessful

