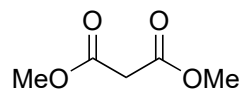
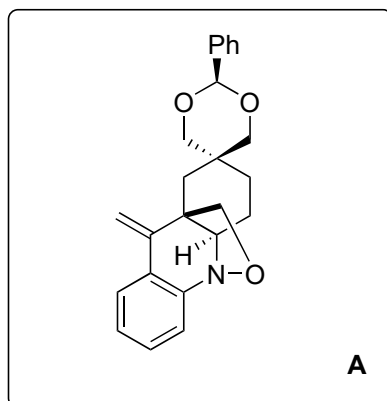


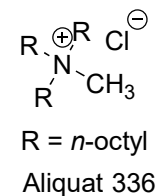
Total Synthesis of Putative Melognine
Yui Irie and Satoshi Yokoshima*
Journal of the American Chemical Society 2024 146 (14), 9526-9531



1 – 11

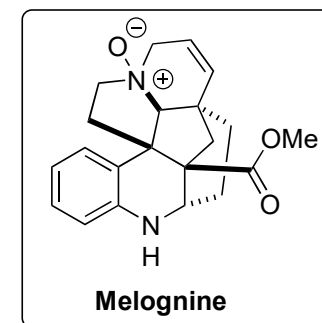


- 1) Propargyl bromide, K_2CO_3
- 2) Ethyl acrylate, DBU
- 3) 2-Iodoaniline, CuI , $Pd(PPh_3)_4$, Et_3N
- 4) $MsCl$, DMAP, pyridine
- 5) DIBAL
- 6) $PhCH(OMe)_2$, $TsOH \cdot H_2O$
- 7) $MsCl$, Et_3N
- 8) K_2CO_3
- 9) ethylene, HG II
- 10) $PhSH$, K_2CO_3
- 11) $Na_2WO_4 \cdot 2H_2O$, aq. H_2O_2 , Aliquat 336

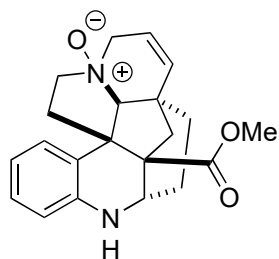


3. Name of the reaction?
 Sonogashira coupling

9. Name of the reaction?
 Enyne metathesis

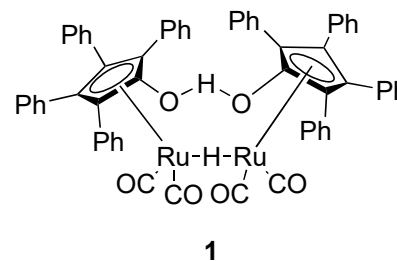


12 – 28



Melognine

- 12) Zn, AcOH
- 13) Ac₂O, DMAP, Et₃N
- 14) Shvo's catalyst (**1**)
- 15) Boc₂O, DMAP
- 16) aq. AcOH
- 17) TIPSOt_f, 2,6-lutidine
- 18) DMP
- 19) Ph₃P=CH₂
- 20) TBAF
- 21) DMP
- 22) N-allylglycine, 130 °C
- 23) HG II
- 24) K₂CO₃, MeOH
- 25) CrO₃, H₂SO₄
- 26) TMSCHN₂
- 27) TFA
- 28) aq. H₂O₂



22) Hint: 2 new circles are formed

25) Name of the reaction?
Jones oxidation

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