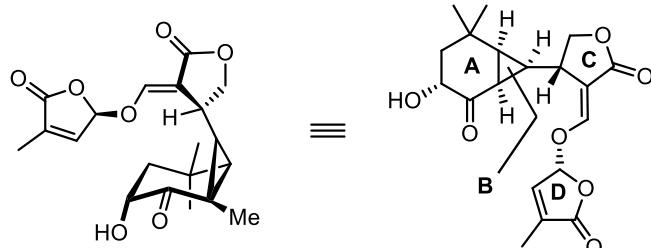
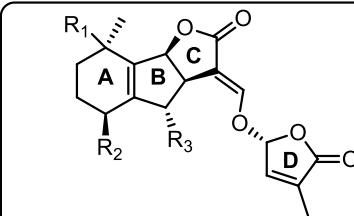


### Avenaoil



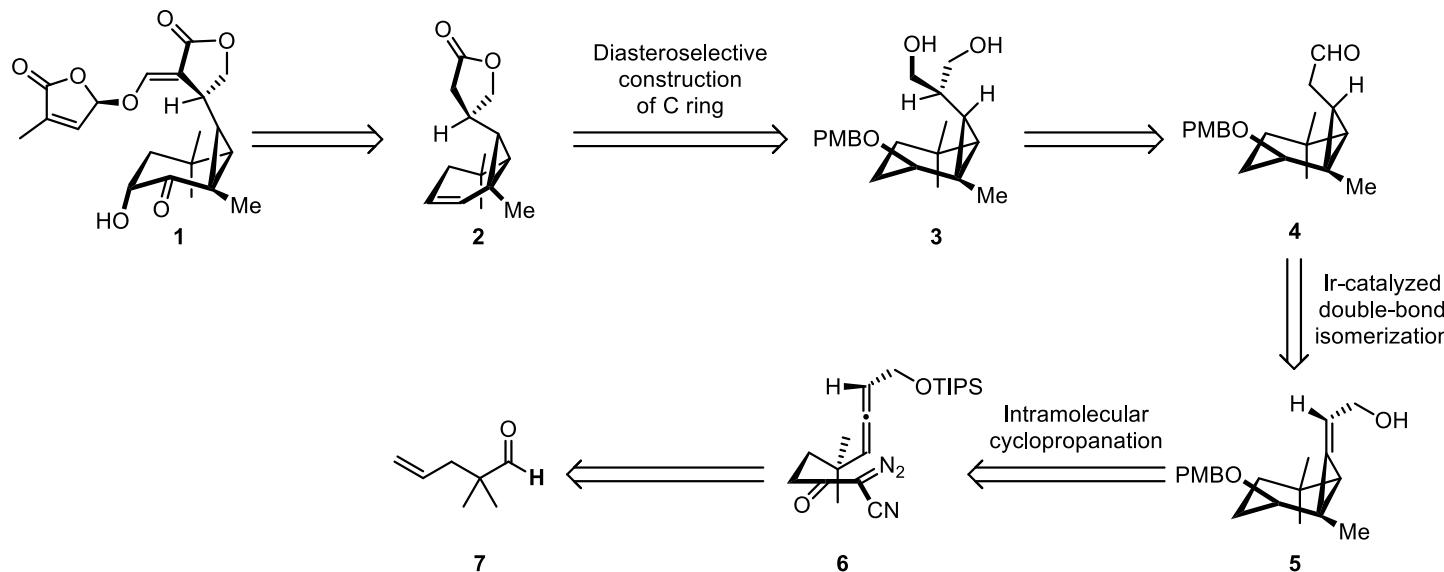
- Isolated from the allelopathic plant black oat (*Avena strigosa* Schreb) by Yoneyama in 2014
- First reported natural C<sub>20</sub> germination stimulant structurally related to strigolactones
- Bicyclo[4.1.0]heptanone skeleton with an all-*cis*-substituted cyclopropane
- First described total synthesis
- 32 steps

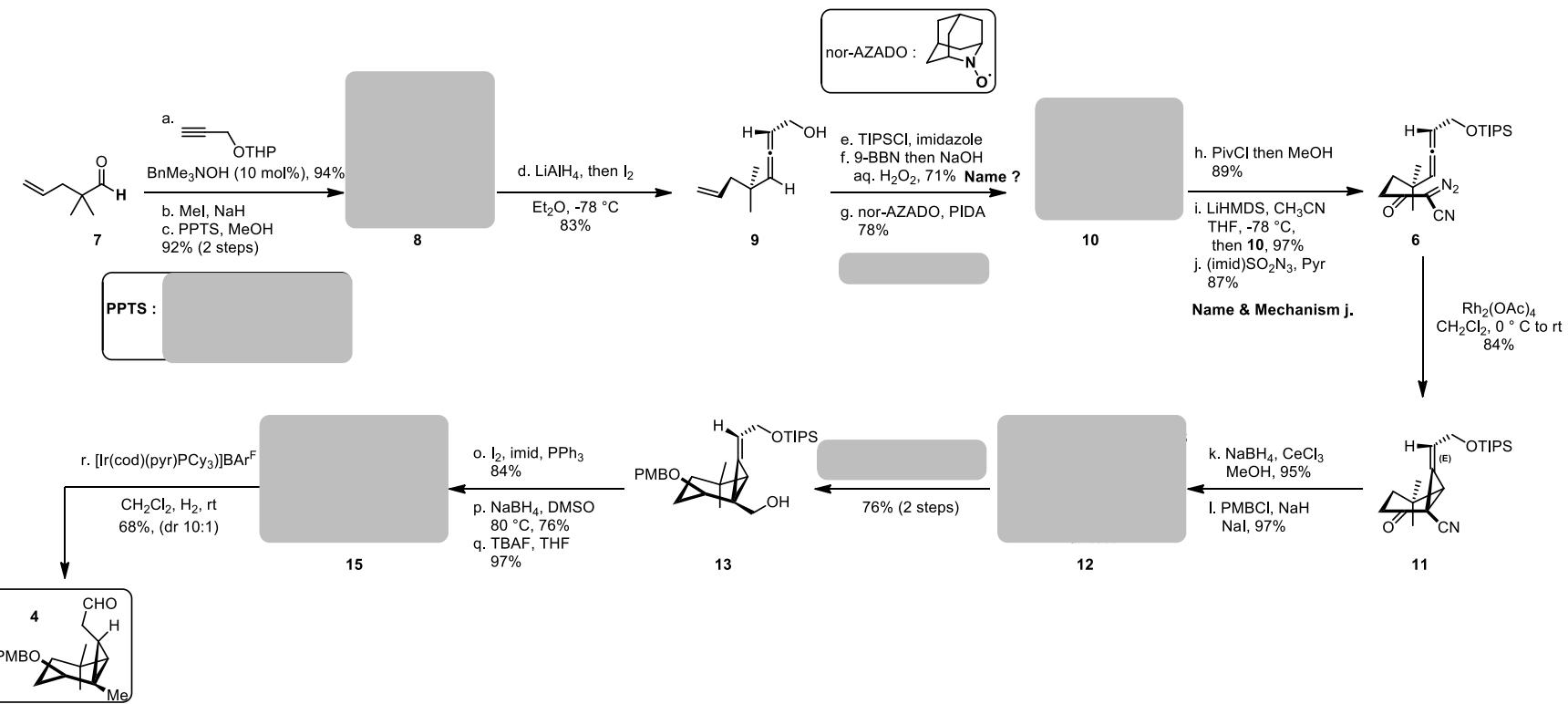
Yasui, M., Ota, R., Tsukano, C. Takemoto, Y. Total synthesis of avenaoil. *Nat Commun* 8, 674 (2017)

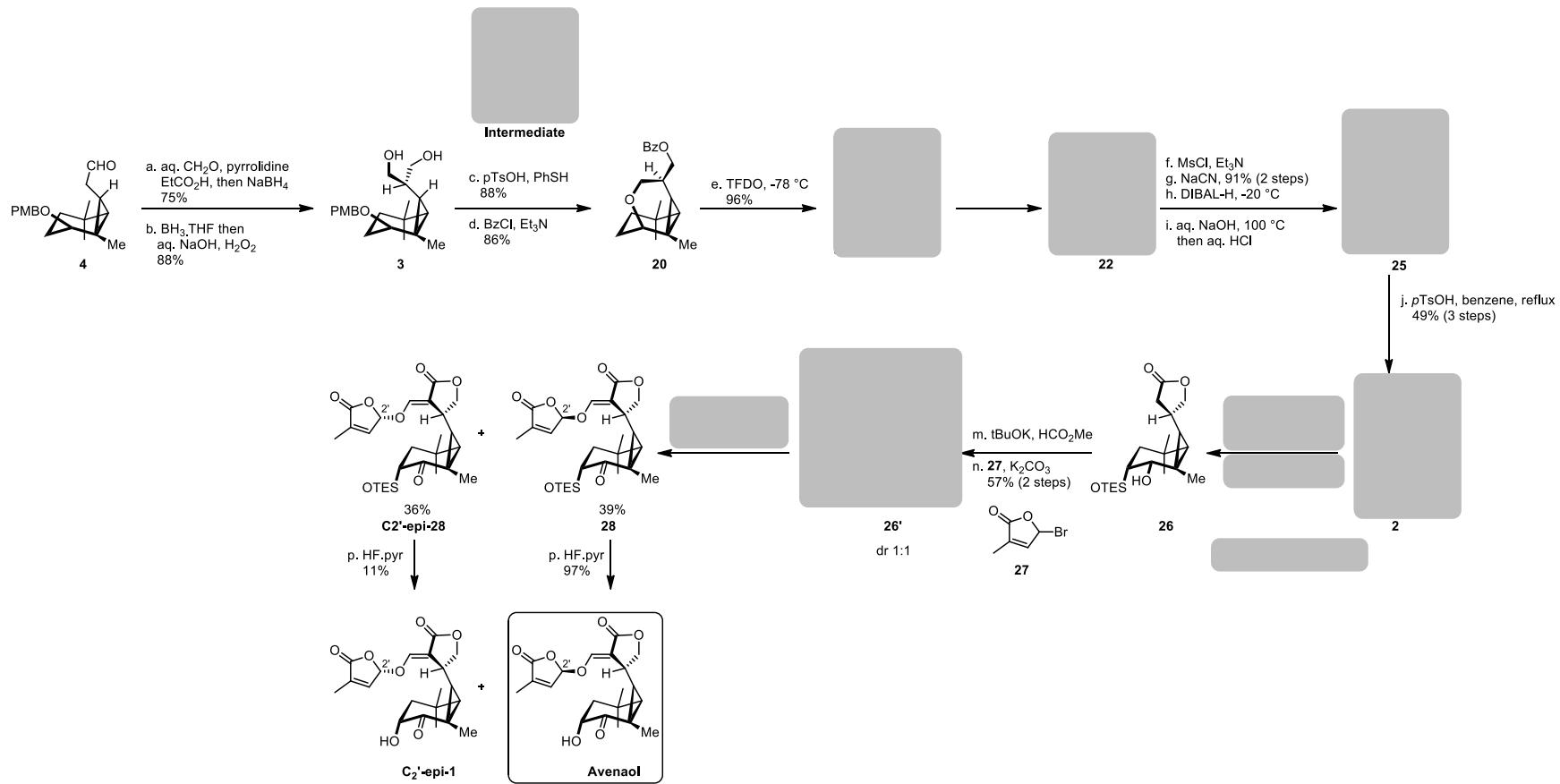


General structure of strigolactones

### Retrosynthesis







## SOLUTIONS

