

a) H₂NMe (2 eq)
 b) AcOH, heat

L

M

N

O

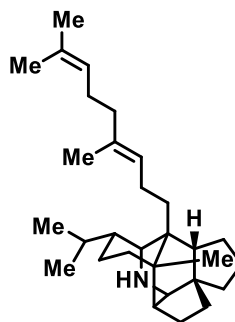
P

Q

Hint: tetracyclic system

R

S



Hint: this cascade reaction involves a formal hetero-Diels-Alder reaction as well as a Prins cyclization.