## Gategory

Synthesis of Natural Products and Potential Drugs

Key words
himandrine
intramolecular
Diels-Alder reaction
Suzuki coupling
cross-metathesis
amination
annulation
palladium


E





(-)-Himandrine


M


L

Significance: (-)-Himandrine was isolated from the bark of the tree Galbulimima belgraveana. Eight of the ten stereogenic centers were created by diastereoselective processes starting from just two stereogenic centers in fragments $\mathbf{B}$ and $\mathbf{H}$.

Comment: The 2-azetidinone moiety at C16 served a dual role: it facilitated the Diels-Alder reaction by providing a $2-N$-acylaminodiene $\mathbf{E}$ with a greater preference for the s-cis conformation and it served as a latent C16 carbonyl $(\mathbf{J} \rightarrow \mathbf{K})$.

