Synthesis of (+)-Haplophytine

**Significance:** The first of the five quaternary centers in haplophytine was installed by an oxidative coupling reaction \( \text{(A + B \rightarrow C)} \) mediated by phenylidyliodonium bis(trifluoroacetate) (PIFA).

**Comment:** The oxidative semi-pinacol rearrangement \( \text{(D \rightarrow E)} \) was also used in Fukuyama's synthesis of haplophytine (Angew. Chem. Int. Ed. 2009, 48, 7600; Synfacts 2010, 3). The lactone ring was created by an oxidative cyclization mediated by \( \text{K}_3\text{[Fe(CN)]}_6\).