Synthesis of (+)-Haplophytine

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

**Comment:** The oxidative semi-pinacol rearrangement \((D \rightarrow E)\) 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 \(K_{3}[Fe(CN)_{6}]\).