1997 alkaloids

alkaloids U 0600 40 - 264

Synthesis of Functionalized Heteroaromatics: Application to Formal Total Synthesis of Camptothecin. — The precursor (XI) for camptothecin (XII) is synthesized via two types of lithiation reactions of pyridines and a palladium catalyzed carbonylation of the methanesulfonate derived from (VIII). — (MURATA, N.; SUGIHARA, T.; KONDO, Y.; SAKAMOTO, T.; Synlett (1997) 3, 298-300; Fac. Pharm. Sci., Tohoku Univ., Aoba, Sendai 980, Japan; EN)

$$\begin{array}{c} \text{Cl.} & \text{1. Et-CHO } & \textbf{(II)}, \text{ tBuLi, THF} & \text{Cl.} & \text{Cl.} & \text{Cl.} \\ & -85 - > 25^{\circ}\text{C} & (69\%) \\ \hline \textbf{2. PCC, } & \text{CH}_2\text{Cl}_2 \\ & & & \text{Et} & \text{O} \\ & & & & \text{III } 60\% \\ \end{array} \quad \begin{array}{c} \text{Cl.} & \text{N.Cl.} \\ & \text{Et} \\ & & \text{O} \\ & & \text{Et} \\ & & & \text{Et} \\ & & & \text{Cl.} \\ & & & \text{Et} \\ & & & \text{Cl.} \\ & & & \text{Et} \\ & & & \text{Cl.} \\ & & & & \text{Cl.} \\ & & & & \text{Cl.} \\ & & & & \text{Cl.} \\ & & & & \text{Cl$$