

A SYNTHETIC PATHWAY TO STRYCHNOS, ASPIDOSPERMA, SCHIZOZYGANE
AND EBURNAMONINE ALKALOIDS BY WAY OF THE NOVEL PHOTOISOMERIZATION

Y. Ban, K. Yoshida, S. Nomura, J. Goto and T. Oishi

Faculty of Pharmaceutical Sciences, Hokkaido University, Sapporo, 060 Japan

The novel photoisomerization of 1-acylindoles accompanied by a conversion of indole to indolenine afforded 3-acylindolenines to be the so far unknown reactive species as a major product. This reaction was thoroughly investigated and applied with success to the total synthesis of *Strychnos*, *Aspidosperma*, *Schizogyane* and *Eburnamine* alkaloids through the versatile intermediate of nine membered ring system (1) synthesized in a one pot reaction by photolysis and the simultaneous ring enlargement, which is summarized in the following Chart.

