2 STEP SYNTHESES OF CYCLOPROPA[c]QUINOLINE DERIVATIVES FROM QUINOLINES IN THE EXPECTATION OF PHYSIOLOSICAL ACTIONS

Yoshiki Hamada and Michiharu Sugiura

Faculty of Pharmacy, Meijo University, Tempaku-ku, Nagoya

Minoru Hirota

Department of Applied Chemistry, Fuculty of Engineering,

Yokohama National University, Minami-ku, Yokohama

1-Cyano-1,2-dihydro-2-methoxyquinolines were obtained in exellent yield from quinolines with $BrCN/NaHCO_3$ in $MeOH/H_2O$. 3-Cyano-1,1-dichloro-2-methoxy-1a,2,-3,7b-tetrahydro-1-H-cyclopropa[c]quinoline derivatives were prepared by treatment of 1-cyano-1,2-dihydro-2-methoxyquinolines with dichlorocarbene in $CHCl_3$.

1,1-Dichloro-3-methyl(or ethyl)-1a,2,3,7b-tetrahydro-2-trichloromethyl-1-H-cyclopropa[c]quinoline derivatives were prepared by treatment of 1,2-dihydro-2-hydroxy-1-methyl(or ethyl)quinolines with dichlorocarbene in $CHCl_3$.

2-Alkyl(or aryl)-1,1-dichloro-1a,2,3,7b-tetrahydro-1-H-cyclopropa[c]quinoline derivatives were prepared by treatment of 3-cyano-1,1-dichloro-2-methoxy-1a,2,3,-7b-tetrahydro-1-H-cyclopropa[c]quinoline with alkyl(or aryl)magnesium halides.