Catharanthus roseus cell suspension cultures were employed for the biotransformation of (−)-caryophyllene oxide (1), and four metabolites, 15-hydroxycaryophyllene oxide (2), 4β,5α-dihydroxycaryophyll-8(13)-ene (3), 2β-hydroxycaryophyllene oxide (4), and 2-hydroxy-4,5-epoxycaryophyllan-13-ol (5) were obtained. Metabolites 4 and 5 were found to be new compounds, and their structures were deduced by different spectroscopic techniques.

Key words: (−)-Caryophyllene Oxide, Biotransformation, Catharanthus roseus, Cell Suspension Cultures