

Production of tylosin by *Streptomyces fradiae* in palm oil medium

Abstract

Streptomyces fradiae (NRRL 2702) produced tylosin when cultured on a synthetic defined medium M3. Palm oil, palm kernel oil and their fractions, as well as fatty acids and glycerol were investigated to serve as the major carbon source in shake flask culture. The lipids, glycerol and fatty acids, particularly palmitic acid but not oleic or lauric acid, were suitable for growth and tylosin production. For palmitic acid, at 168 h, the dry cell yield and tylosin production were 8.9 mg/ml and 0.84 mg/g cell mass respectively.