

ABSTRACT

The study was concerned with the production of avermectins from *Streptomyces avermitilis*. An industrial strain of *Streptomyces avermitilis* (DSMZ-41443) was employed throughout this study. The submerged fermentation technique was used for its production. The composition of the medium used was (per litre): fructose 50 g, malt extract 30g, caesine (hydrolysed) 2.5g, PEG 2.5g and K₂HPO₄, 1g. The avermectins are intracellular products which were extracted from cell biomass in methanol and analysed through Thin Layer Chromatography and High Performance Liquid Chromatography. The concentration of avermectin B_{1a} extrapolated from the standard curve is 2 ppm and that of avermectin B_{1b} produced by the strain is found to be 6 ppm.