

Growth performance of *Stenotrophomonas maltophilia* (SB16) in different culture media

ABSTRACT

An in vitro experiment was conducted to test the growth of *Stenotrophomonas maltophilia* (Sb16) in different media in laboratory. The treatments for different media were made by adding molasses (2.5, 5.0, 7.5, 10.0, 12.5, 15.0, 17.5 and 20.0 g w/v) as carbon sources compared to commonly used Nutrient Broth and Tryptic Soy Broth. Dry cell mass of *S. maltophilia* (Sb16), total reducing sugar and total N in culture media were determined. The highest growth of *S. maltophilia* (14.84 mg/ml) was observed at sugarcane molasses concentration 20% w/v after 24 hrs of incubation. Total reducing sugar increased with increasing molass concentration. High total N (505 mg/l) was produced in 7.5% w/v molasses concentration.

Keyword: Sugarcane molasses; *Stenotrophomonas maltophilia*; Nitrogen fixation