

ABSTRACT

The present study is concerned with the production of cider vinegar from apple juice after its ethanol fermentation using *Acetobacter sp.* GCB-14 by submerged fermentation in 250 Erlenmeyer flasks. Different concentrations of sucrose in apple juice were used as a substrate for ethanol production. The maximum ethanol production (7.25 %) was obtained when sucrose (17 %) after its supplementation was used as a substrate for ethanol production using *Saccharomyces cerevisiae* GCB-34. The cultural conditions such as incubation period (48 hr), incubation temperature (30°C), inoculum size (4 %, v/v), pH (3.0), fermentation volume (50 ml) were also optimized for maximum vinegar production.