ABSTRACT

Wine is the end product of alcoholic fermentation of fruit juice. For wine manufacture, one of the most important ingredients is yeast. Usually wine yeast, which contain higher amount of *Saccharomyces ellipsoideus* is used for wine making. But it is very expensive. Mixed yeast contain both *Saccharomyces ellipsoideus* and *Saccharomyces cerevisiae*. But the quality of the wine fermented with mixed yeast is poor than that prepared by wine yeast.

A study is to identify a culture medium, which would enhance the growth of *Saccharomyces ellipsoideus*. Culture media with different qualities of malt extract were assessed to determine the best medium for better growth of *Saccharomyces ellipsoideus*. Inoculation samples were taken during initial fermentation of wine. Microscopic examination was carried out to identify the dominant cell type of the colonies in the culture media.

During the initial fermentation; the optimum cell multiplication was observed on the 4th day. This would be the ideal time to culture the yeast cells for isolation. The medium containing 6.5% malt extract and 1% yeast extract was found to be the most favourable nutritional conditions for better growth of *Saccharomyces ellipsoideus* from a mixed yeast culture. Performance testing with *Saccharomyces ellipsoideus* culture was done on a preliminary basis. The study reveals that the above medium could be exploited in isolating *Saccharomyces ellipsoideus* from the mixed yeast. Performance testing studies, if carried out on a larger scale, would be beneficial.