Mixed anaerobic fermentation by clostridium and pseudomonas species ABSTRACT

The selection of bacterial strains for the anaerobic fermentation if crucial since it determine fermentation performance and influences methods for feedstock pre-treatment, hydrolysis, and solvent recovery. The main bacterial strain used in anaerobic fermentation of ABE production is Clostridium species. However, the performance of wild-type Clostridium strains is limited by solvent tolerance and low cell density during the solventogenic phase of Clostridium growth and causes low production of solvent. So mixed cultures are proposed to overcome the mentioned drawbacks.