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Effect of apple pomace and soybean pomace on cell growth of DL-1 and DL-2 isolated from soil

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The potential of agro-industrial byproducts as the substrate for the cell growth of microorganisms, DL-1 and 2, was investigated. The agro-industrial byproducts used in the study were apple pomace and soybean pomace. Apple pomace is a byproduct of juice extraction for the apple juice production and soybean pomace is a byproduct from the soy sauce production. Major components of apple pomace and soybean pomace were carbohydrate and protein, respectively. Optimal ratios of apple pomace as the carbon source and soybean pomace as the nitrogen source for the cell growth of DL-1 and 2 were 6:4 in which condition generation times of DL-1 for 36 hr culture and DL-2 for 24 hr culture were 4.3 hr at 30°C. It showed that apple pomace and soybean pomace were good substrate for the cell growth of DL-1 and 2, which would be used for the microbial utilizer to enhance the production of agricultural products.