

CHARACTERISTICS OF KOMBUCHA FERMENTATION ON ELDERBERRY TEA

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Kombucha is a symbiotic association of several bacteria and yeasts. Kombucha ferments sweetened black/green tea and the obtained beverage is refreshing, slightly carbonated, mildly acidic, and possess beneficial effects to humans. Fermentation lasts for 7-10 days on 25-30°C. Kombucha metabolizes other substrates, such as herbal teas, milk, fruit juices etc. Elderberry (*Sambucus nigra*) flower tea is one of the alternative substrates for kombucha fermentation, and also has positive impact to humans. The aim of this study was to investigate the characteristics of kombucha fermentation on elderberry tea, which was prepared by adding 7% sucrose and 2.25 g/L of dried elderberry flowers to boiling tap water. After the tea was cooled to 25°C, 10% of kombucha beverage from previous fermentation was added. Characteristics were determined by measuring the pH values, total acidity and by sensory marking of the beverage during fermentation on 25°C. Total acidity increased and pH values of the products decreased during the fermentation. The highest sensory mark showed the beverage obtained after 3 days of fermentation, i.e. fermentation was significantly shorter. This product was characterized with light-yellow colour and odour and taste characteristic for kombucha and elderberry tea. Total acidity of this sample amounted 6.58 g acetic acid/L and pH was 2.9. Elderberry tea can be successfully used for kombucha fermentation, since the obtained products showed values characteristic for traditional kombucha products.

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