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Development of Onion Wine Using Onion Pomace and Its Quality Properties

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Wasted onion pomace from onion processing is one of the resources to utilize for fermentation industry. This study was conducted to search optimum conditions of onion syrup using wasted onion pomace to product onion wine and to analyse quality properties of onion wine by using it. The most optimum added concentration, temperature and time of onion syrup using onion pomace for fermenting onion wine were 20%, 35°C and 24 hours. Quality properties of onion wine using optimized onion syrup were analyzed according to temperature as 25, 30 and 35°C for 15days. Alcohol contents of onion wine were significantly increased for 3days and then gradually increased by 16.90, 15.80 and 15.40% at 25, 30 and 35°C for 15days, respectively. Saccharinity peaked at the first day of fermentation as 13.3, 12.4 and 14.0 °Brix at each temperature and then decreased by 7.5, 7.2 and 7.4 °Brix during fermentation periods. Also, reducing sugar contents showed similarity to figure of saccharinity. However, reducing sugar contents was dramatically decreased from the first day of fermentation. pH was not changed significantly after beginning of fermentation of onion wine. Production of onion wine by using wasted onion pomace is expected with the development of onion process as a part of onion industry.

Key words: Onion, Onion wine, Pomace

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Optimization for the Fermentation Process and Quality Properties of Kiwi Wine

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Kiwi contains lots of vitamins and inorganic salts compared with other various fruits. Kiwi is supposed to be superior material for fermentation of wine. This study was investigated the optimum condition for fermentation of kiwi wine to improve its quality and taste. On fermentation of kiwi wine, optimum initial sugar concentration was 24 °Brix and optimum temperature was 25°C. The sensory characteristics of fermented kiwi wine were evaluated about incense, sour taste and sweet taste. Quality properties of kiwi wine fermented under optimized fermentation conditions were analyzed. Total sugar, polyphenol contents, tannin and acidity of kiwi wine were 50.00, 40.66, 2.84 mg/mL and 0.96%. It showed greatly higher value than that of commercial grape wine. Total organic acid, alcohol contents and pH were 132.95mg%, 12% and 3.59, respectively. It is expected to produce high quality kiwi wine by the establishment of optimum fermentation condition of kiwi wine.

Key words: Kiwi wie, fermentation,