

INTISARI

Tujuan dari penelitian ini adalah untuk mengetahui korelasi konsentrasi inokulum *Acetobacter aceti* terhadap karakteristik asam asetat jagung putih dan organoleptik asam asetat jagung putih dengan konsentrasi *Acetobacter aceti* 10%, 12%, dan 15%.

Rancangan penelitian yaitu metode regresi linier sederhana, dimana variabel bebas menyatakan lama fermentasi yaitu 1 hari, 2 hari, 3 hari, 4 hari, 5 hari, 6 hari, dan 7 hari dengan variabel terikat menyatakan kadar asam asetat, kadar alkohol, pH asam asetat. Rancangan analisis dilakukan untuk menentukan hubungan variabel bebas terhadap variabel tidak bebas dengan menghitung korelasi antara kedua variabel tersebut terhadap respon yang diukur. Respon organoleptik meliputi warna dan aroma.

Hasil penelitian menunjukkan bahwa konsentrasi inokulum *Acetobacter aceti* (10%, 12%, 15%) berkorelasi positif terhadap karakteristik kadar asam asetat dan kadar alkohol konsentrasi *Acetobacter aceti* 15% tetapi konsentrasi inokulum *Acetobacter aceti* 10%, 12%, 15% berkorelasi negatif terhadap pH dan kadar alkohol (konsentrasi inokulum *Acetobacter aceti* 10% dan 12%). Respon organoleptik warna hari ke satu dan hari ke tujuh memiliki tingkat kesukaan agak suka dan suka. Respon organoleptik aroma hari ke satu dan hari ke tujuh memiliki tingkat kesukaan agak tidak suka dan suka.

ABSTRACT

The purpose of this research is to know the correlation of Acetobacter aceti inoculum concentration to characteristic of white acetic acid and white acetic acid with Acetobacter aceti concentration of 10%, 12%, 15%.

The design of the research is simple linear regression method, where the independent variables express the duration of 1 day, 2 days, 3 days, 4 days, 5 days, 6 days, and 7 days with dependent variable expressing acetic acid, alcohol content, pH acetic acid, . The design of the analysis is conducted to determine the relationship of independent variables to the dependent variable by calculating the correlation between the two variables to the measured response. Organoleptic response includes color and aroma.

The results showed that the concentration of Acetobacter aceti inoculum (10%, 12%, 15%) was positively correlated with acetic acid concentration and Acetobacter aceti concentration of 15% but Acetobacter aceti aceti 10%, 12%, 15% and alcohol concentration (Acetobacter aceti concentration 10% and 12%). The organoleptic response of day to day one and the seventh day has a favorite level of likes and likes. Organoleptic response of day one and seventh day scents has a rather dislike and likes favorite level.