INTISARI

Sirup merupakan salah satu minuman yang telah lama dikenal di Indonesia. Sirup dapat dibuat dari salak untuk meningkatkan umur simpan salak. Penstabil dan pengental dibutuhkan dalam pembuatan sirup untuk menjaga stabilitas sirup agar tidak terjadi pengendapan selama penyimpanan. Oleh karena itu, penting untuk dilakukan penambahan penstabil dan pengental seperti *Carboxy Methyl Cellulose* (CMC). Penelitian ini bertujuan untuk mengetahui pengaruh jenis CMC yang ditambahkan pada berbagai konsentrasi terhadap sifat kimia, fisik, dan organoleptik sirup salak.

Pada penelitian ini, daging buah salak diblansir, direndam dalam larutan garam 5%, dihancurkan, dan disaring untuk mendapatkan sari salak. Sari salak ditambah CMC lalu dihomogenisasi selama 2 menit. Gula sebanyak 65% ditambahkan ke sari salak kemudian dipanaskan pada suhu 100^{o}C selama 25 menit diikuti dengan penambahan asam sitrat sebanyak 0,01%. Karakteristik sirup salak yang diamati antara lain karakteristik kimia (kadar air, gula total, gula reduksi, pH, total fenolik, dan aktivitas antioksidan), karakteristik fisik (warna, viskositas, dan total padatan terlarut), dan organoleptik (warna, aroma, kekentalan, rasa, dan keseluruhan). Penelitian dilaksanakan menggunakan Rancangan Acak Kelompok Lengkap dengan dua variabel independen yaitu jenis CMC (komersial dan biji salak) dan konsentrasi CMC (0,1%; 0,3%; dan 0,5%). Data yang diperoleh kemudian dianalisis secara statistik menggunakan *Statistical Product and Service Solution* (SPSS) versi 20 dengan ANOVA satu arah dan dua arah yang dilanjutkan dengan *Duncan Multiple Range Test*dengan tingkat signifikansi 5%.

Hasil menunjukkan bahwa kadar air, gula total, gula reduksi, total fenolik, dan warna (a^{*}) sirup salak yang ditambah CMC komersial lebih rendah daripada sirup salak yang ditambah CMC biji salak. Penambahan CMC komersial maupun CMC biji salak tidak berpengaruh terhadap pH dan aktivitas antioksidan sirup salak. Penambahan CMC komersial dan CMC biji salak pada berbagai konsentrasi meningkatkan viskositas dan total padatan terlarut namun menurunkan kadar air dan gula reduksi sirup salak. Secara keseluruhan, sirup salak yang ditambah CMC komersial 0,3% memiliki nilai kesukaan tertinggi.

Kata kunci: salak pondoh, sirup, sirup salak, CMC.

ABSTRACT

Syrup is one of well known beverage in Indonesia. Syrup can be made from“pondoh super” snake fruit to increase the shelf life of this fruit. Stabilizer and thickener are needed in making syrup to keep the stability of syrup in order to prevent precipitation during storage. Therefore, it is necessary to add stabilizer and thickener in syrup such as Carboxy Methyl Cellulose (CMC). This study aimed to determine the effects CMC types which added in various concentrations on chemical, physical, and organoleptic properties of snake fruit syrup.

In this study, the fresh snake fruit fleshes were blanched, soaked in 5% salt solution, crushed, and filtrated to get snake fruit extract. The extract was added with CMC then homogenated for 2 minutes. 65% of sugar were added to the extract then heated in 100^{o}C for 25 minutes followed by adding 0,01% of citric acid. The chemical properties (moisture content, total sugar, reducing sugar, and pH), physical properties (viscosity, color, and total soluble solid), and organoleptic properties (color, aroma, viscosity, flavor, and overall) of snake fruit syrup were analyzed.Randomize Complete Block Design was used in this study with 2 independent variables. First is CMC types (commercial and snake fruit) and second is CMC concentrations (0,1%; 0,3%; and 0,5%). This study was statistically analyzed by SPSS 20 using one way and two ways ANOVA then continued by using *Duncan Multiple Range Test* and T-test with 5% significance level.

The result showed that moisture content,total sugar, reducing sugar, total phenolic, and color (a^{*}) of snake fruit syrup added by commercial CMC were lower than snake fruit syrup added by snake fruit seed CMC. The adding of commercial CMC and snake fruit seed CMC did not influence pH, antioxidant activity, and color (b^{*}) of snake fruit syrup. The adding of commercial and snake fruit seed CMC in various concentration increased viscosity and total soluble solid and decreased moisture content and reducing sugar. Overall, snake fruit syrup with 0,3% commercial CMC had the highest hedonic value.

Keywords: pondoh snake fruit, syrup, snake fruit syrup, CMC.