

ABSTRACT

The purpose of this research was to study the effect of ratio between moringa leaves flour to powder milk and correct cinnamon concentration in the making of dark chocolate towards the characteristic of dark chocolate that had been made. Also to obtain dark chocolate product that had antioxidant improvement which was obtained from moringa leaves flour and cinnamon and micro nutrients or macro nutrients content from moringa leaves flour.

The study was conducted using a randomized block design (RBD), which consisted of two factors, namely A (comparison of Moringa leaves powder and milk powder) and factor B (concentrations of cinnamon). The reesearch method consisted of preliminary research and main research. The premilinary research consisted of choosing varieties of cocoa powder brand that was bendsorp, java, and boardeux. Main research consisted of making of dark chocolate with moringa leaves flour and powder milk with ratio (2:1), (1:1), and (1:2) and cinnamon concentration (1%, 3%, and 5%). This research responses consisted of chemical response (protein conten, fat content, and antioxsidant activity), microbiology response (antimicrobial substance) and organoleptic reponse towards taste, aroma, texture, and aftertaste.

The result of this research showed that the best dark chocolate product is the treatment of sample a2b3 (moringa leaves flour and powder milk with ratio 1:1, 5% of cinnamon concentration), based on organoleptic test it was the most liked by panelists with 138,1 µg/mL antioxidant activity, protein content of 11,50 %, fat content of 27,94% .

Keywords : Dark chocolate, Moringa leaves, cinnamons

INTISARI

Tujuan penelitian ini yaitu untuk mempelajari pengaruh perbandingan tepung daun kelor dengan susu bubuk dan konsentrasi kayu manis yang tepat dalam pembuatan *dark chocolate* terhadap karakteristik *dark chocolate* yang dihasilkan. Selain itu juga untuk mendapatkan produk *dark chocolate* yang memiliki sifat fungsional dengan peningkatan kandungan antioksidan yang diperoleh dari tepung daun kelor dan kayu manis, dan kandungan zat gizi mikro ataupun makro dari tepung daun kelor.

Penelitian dilakukan dengan menggunakan Rancangan Acak Kelompok (RAK) yang terdiri dari 2 faktor, yaitu faktor A (perbandingan tepung daun kelor dan susu bubuk) dan faktor B (konsentrasi kayu manis). Metode penelitian terdiri dari penelitian pendahuluan dan penelitian utama. Penelitian pendahuluan meliputi penentuan macam-macam merk cokelat bubuk (*cocoa powder*), yaitu Bendsorp, Java, dan Boardeux. Penelitian utama meliputi pembuatan *dark chocolate* dengan perbandingan tepung daun kelor dan susu bubuk yaitu (2:1), (1:1), dan (1:2) dan konsentrasi kayu manis (1%, 3%, dan 5%). Respon penelitian ini yaitu meliputi respon kimia (kadar protein, kadar lemak, aktivitas antioksidan), respon mikrobiologi (zat anti mikroba) dan respon organoleptik terhadap rasa, aroma, tekstur dan *aftertaste*.

Hasil penelitian menunjukkan bahwa produk *dark chocolate* terbaik adalah perlakuan sampel a2b3 (perbandingan tepung daun kelor dan susu bubuk 1 : 1, konsentrasi kayu manis 5 %), karena dilihat dari uji organoleptik merupakan sampel yg disukai panelis dengan aktivitas antioksidan yaitu 138,1 µg/mL, kadar protein 11,50 %, kadar lemak 27,94 %.

Kata kunci : Dark chocolate, daun kelor, kayu manis