

INTISARI

SETYANINGSIH, ATI., 2015, FORMULASI TABLET KUNYAH EKSTRAK KULIT BUAH NAGA SUPER MERAH (*Hylocereus costaricensis*) SEBAGAI ANTIOKSIDAN DENGAN KOMBINASI MANITOL DAN CMC-Na, SKRIPSI, FAKULTAS FARMASI, UNIVERSITAS SETIA BUDI, SURAKARTA.

Kulit buah naga super merah (*Hylocereus costaricensis*) merupakan limbah yang banyak mengandung senyawa antioksidan yaitu polifenol dan flavonoid. Penelitian ini bertujuan untuk mengetahui pengaruh kombinasi manitol dan CMC-Na terhadap sifat fisik dan aktivitas antioksidan tablet kunyah ekstrak kulit buah naga super merah.

Ekstrak kulit buah naga super merah diperoleh dengan cara maserasi menggunakan pelarut etanol 70%. Ekstrak tersebut kemudian dibuat sebanyak 5 formula tablet kunyah dengan kombinasi manitol dan CMC-Na yaitu : 40%:6%; 47,5%:5,25%; 55%:4,5%; 62,5%:3,75%; 70%:3%. Tablet dicetak dengan bobot rata-rata 1500 mg. Evaluasi tablet kunyah dilakukan terhadap sifat fisik meliputi keseragaman bobot, kekerasan, kerapuhan, tangga rasa, waktu hancur dan aktivitas antioksidan terhadap DPPH. Data dianalisis dengan program SPSS *Statistic version 17.0* menggunakan *One Way Anova*.

Hasil penelitian menunjukkan bahwa adanya aktivitas antioksidan dalam tablet kunyah ekstrak kulit buah naga super merah dan semakin besar kombinasi manitol dan CMC-Na yang digunakan mengakibatkan kekerasan tinggi, waktu hancur lama, kerapuhan rendah, dan aktivitas antioksidan semakin rendah.

Kata kunci : tablet kunyah, kulit buah naga super merah, manitol, CMC-Na.

ABSTRACT

SETYANINGSIH, ATI., 2015, CHEWING TABLET FORMULATION OF SUPER RED DRAGON FRUIT PEELS EXTRACT (*Hylocereus costaricensis*) AS ANTIOXIDANT COMBINATION WITH MANNITOL AND CMC-Na. THESIS, FACULTY OF PHARMACY, SETIA BUDI UNIVERSITY, SURAKARTA.

Super red dragon fruit peels (*Hylocereus costaricensis*) are waste contain that many antioxidant compounds, namely polyphenols and flavonoids. The study was aimed to know the effect of the combination of mannitol and CMC-Na on the physical properties and antioxidant activity in formulation of chewing tablet super red dragon fruit peels extract.

Super red dragon fruit peels extract was obtained by maceration using ethanol 70%. Then the extract were made into 5 formula chewing tablet with combination of mannitol and CMC-Na, i.e. : 40%:6%; 47,5%:5,25%; 55%:4,5%; 62,5%:3,75%; 70%:3%. The tablets were made in weight 1.500 mg. Chewing tablet evaluation were done on the physical tested including weight uniformity, hardness, friability, taste perception, disintegration, and antioxidant activity by DPPH method. The data was analyzed by SPSS Statistic version 17.0 using one way Anova.

The results indicated that the antioxidant activity in chewing tablet super red dragon fruit peels extract and the combination of mannitol and CMC-Na were effected on the physical property test of tablet and taste perception from chewing tablet super red dragon fruit peels extract.

Key Words: chewing tablet, super red dragon fruit peels, mannitol, CMC-Na.