

INTISARI

ANGGIE., 2020, FORMULASI TABLET HISAP SARI BUAH BELIMBING MANIS (*Averrhoa carambola L.*) DENGAN VARIASI KONSENTRASI PVP SEBAGAI BAHAN PENGIKAT SECARA GRANULASI BASAH, KARYA TULIS ILMIAH, FAKULTAS FARMASI, UNIVERSITAS SETIA BUDI.

Buah belimbing manis (*Averrhoa Carambola L.*) memiliki kandungan vitamin C dan flavonoid yang cukup tinggi dan berfungsi sebagai antioksidan. Dengan kandungan gizi yang tinggi menjadikan belimbing manis sangat potensial untuk dijadikan suplemen makanan, agar lebih mudah penggunaannya maka perlu dibuat dalam suatu bentuk sediaan yaitu tablet hisap. Penelitian ini bertujuan untuk mendapat formula tablet hisap sari buah belimbing manis yang baik dengan variasi konsentrasi bahan pengikat PVP.

Pembuatan tablet hisap sari buah belimbing manis (*Averrhoa Carambola L.*) dibuat dengan metode granulasi basah. Granulasi dibuat dengan tiga formula variasi konsentrasi bahan pengikat PVP yaitu 3%, 5% dan 7%. Pengujian terhadap granul meliputi susut pengeringan, waktu alir dan sudut diam. Pengujian pada tablet meliputi keseragaman bobot, kekerasan, waktu larut dan tanggapan rasa. Data yang diperoleh dianalisis secara statistik menggunakan uji ANOVA dengan taraf kepercayaan 95%.

Hasil penelitian menunjukkan bahwa sari buah belimbing manis (*Averrhoa Carambola L.*) dapat dibuat sediaan tablet hisap. Hasil sifat fisik tablet pada keseragaman bobot memenuhi persyaratan. Pengujian kekerasan tablet memenuhi persyaratan 7-14 kg yaitu formula I 7.88 kg, formula II 9.75 kg, dan formula III 12.22 kg. Uji waktu larut ketiga formula memenuhi persyaratan antara 5 – 10 menit yaitu formula I 6.04 menit, formula II 6.45 menit, dan formula III 7.18 menit. Pengujian tanggap rasa ketiga formula lebih dari 50% responden dapat menerima tablet hisap sari buah belimbing.

Kata kunci : buah belimbing manis (*Averrhoa Carambola L.*), tablet hisap, PVP

ABSTRAK

ANGGIE, 2020, FORMULATION OF LOZENGES OF JUICE EXTRACT SWEET STARFRUIT (*Averrhoa carambola L.*) WITH VARIATIONS IN THE CONCENTRATION OF PVP AS A BINDER BY WET GRANULATION METHOD, SCIENTIFIC WORK, PHARMACY FACULTY, SETIA BUDI UNIVERSITY, SURAKARTA.

Sweet star fruit (*Averrhoa Carambola L.*) contains vitamin C and flavonoids which are quite high and contain antioxidant. With high nutritional content makes sweet star fruit very potential to be used as a food supplement, so it is easier to use it needs to be made in a dosage forms such as lozenges. The aim of this study was to obtain a good starfruit sweet juice extract formula with variations in the concentration of PVP binder.

The making of sweet starfruit juice (*Averrhoa Carambola L.*) lozenges is made by wet granulation method. Granulation was made with three formulas for variations in the concentration of PVP binder, namely 3%, 5% and 7%. Tests on granules include drying losses, flow times and stationary angles. Tests on tablets include weight uniformity, hardness, dissolution time and taste responses. The data obtained were statistically analyzed using the ANOVA test with a confidence level of 95%.

The results showed that sweet starfruit juice (*Averrhoa Carambola L.*) can be made as lozenges. The results of the physical properties of tablets on the uniformity of weights meet the requirements. Hardness testing of tablets fulfills the requirements of 7-14 kg formula I 7.88 kg formula II 9.75 kg and formula III 12.22 kg. The dissolved time test of the three formulas meets the requirements of 5-10 minutes, namely formula I 6.04 minutes, formula II 6.45 minutes, and formula III 7.18 minutes. Taste response testing of the three formulas more than 50% of respondents can receive star fruit juice suction tablets.

Keywords: sweet star fruit (*Averrhoa Carambola L.*), lozenges, PVP