

ABSTRAK

FORMULASI DAN EVALUASI SEDIAAN SUSPENSI EKSTRAK BUNGA TELANG (*Clitoria ternatea* L.) DENGAN VARIASI *SUSPENDING AGENT* PGA (*Pulvis Gummi Arabici*) DAN Na-CMC (*Natrium Carboxymethylcellulosa*) (Oleh: Irma Alnapa; Pembimbing apt. Fairuz Yaumil Afra, M.Farm dan apt. Karunita Ika Astuti, M.Farm; 2024; 101 Halaman)

Bunga telang dapat digunakan untuk berbagai pengobatan salah satunya sebagai antioksidan. Dalam formulasi suspensi zat aktif yang digunakan yaitu bunga telang (*Clitoria ternatea* L.). Digunakan kombinasi *suspending agent* PGA (*Pulvis Gummi Arabici*) dan Na-CMC (*Natrium Carboxymethylcellulosa*). Tujuan penelitian ini untuk mengetahui karakteristik sediaan suspensi kombinasi *suspending agent* PGA dan Na-CMC serta mengetahui konsentrasi berapakah yang dapat memberikan mutu fisik yang paling baik diantara keempat formula yang dibuat. Evaluasi stabilitas fisik setelah sediaan dibuat meliputi organoleptis, pH, berat jenis, viskositas, sedimentasi dan redispersi. Hasil pengamatan karakteristik sediaan suspensi ekstrak bunga telang pada uji organoleptis masing-masing formula terdapat warna cokelat muda, bau khas aromatik bunga telang dan rasa pahit agak manis. Memiliki pH 4, memiliki nilai berat jenis >1,00 g/mL, sedimentasi kurang dari <1 yang artinya memenuhi rentang berat jenis dan sedimentasi suspensi yang baik, mudah terdispersi kembali serta memiliki nilai viskositas yang baik. Dari hasil penelitian diketahui konsentrasi PGA dan Na-CMC tidak mempengaruhi stabilitas fisik suspensi dan yang memberikan mutu fisik yang paling baik diantara keempat formula yaitu formula 2 dengan perbandingan *suspending agent* PGA 2% dan Na-CMC 1,25%.

Kata kunci: Bunga telang, ekstrak etanol, suspensi, *suspending agent*

ABSTRACT

FORMULATION AND EVALUATION OF SUSPENSION PREPARATIONS OF TEMPLE FLOWER EXTRACT (*Clitoria ternatea* L.) WITH VARIATIONS OF SUSPENDING AGENT PGA (*Pulvis Gummi Arabici*) AND Na-CMC (*Natrium Carboxymethylcellulosa*) (By: Irma Alnapa: Supervisor apt. Fairuz Yaumil Afra, M.Farm and apt. Karunita Ika Astuti, M.Farm:2024; 101 page)

Bunga telang can be used for various treatments, one of which is as an antioxidant. In the suspension formulation of butterfly pea flower extract (*Clitoria ternatea* L.), a combination of suspending agent PGA (*Pulvis Gummi Arabici*) and Na-CMC (*Natrium Carboxymethylcellulosa*) is used. The aim of this research is to determine the characteristics of suspension preparations with a combination of suspending agents PGA and Na-CMC and to find out what concentration can provide the best physical quality among the four formulas made. Evaluation of physical stability after the preparation is made includes organoleptic, pH, specific gravity, viscosity, sedimentation and redispersion. The results of observing the characteristics of the suspension preparation of butterfly pea flower extract in the organoleptic test of each formula contained a light brown color, a distinctive aromatic smell of butterfly pea flower and a slightly sweet bitter taste. Has a pH of 4. Has a specific gravity value of >1,00 g/mL, sedimentation is less than <1, which means it meets the specific gravity range and good suspension sedimentation, is easily re-dispersed and has good viscosity values at F1 and F2. from the research results, it is known that the concentrations of PGA and Na-CMC influence the physical stability of the suspension and which provides the best physical quality among the four formulas, namely formula 2 with a ratio of 2% PGA suspending agent and 1,25% Na-CMC.

Keywords: Bunga telang, ethanol extract, suspensio, suspending agent