Formulasi masker mata hidrogel anti-aging yang mengandung ekstrak etanol biji markisa ungu passiflora edulis sebagai sediaan nutrakosmesetika = Formulation of anti-aging hydrogel eye patch containing ethanol extract of purple passion fruit seed passiflora edulis as nutracosmeceutical product

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Abstrak

ABSTRACT
Biji markisa ungu (Passiflora edulis) diketahui mengandung polifenol yang dapat mengatasi tanda penuaan. Kandungan polifenol biji markisa ungu diekstraksi menggunakan etanol 80%. Penelitian ini bertujuan untuk memperoleh formula masker mata hidrogel dengan kestabilan dan karakteristik fisik yang baik. Masker mata hidrogel yang mengandung ekstrak biji markisa ungu 0,1% diformulasikan dengan alginat 3% dan xanthan gum 0,5%, selanjutnya dibiarkan dalam larutan kalsium klorida 0,5% selama 60 menit. Kestabilan dan karakteristik fisik masker mata hidrogel dievaluasi melalui pengamatan organoleptis, daya mengembang, konsistensi, kekuatan peregangan, dan persen elongasi. Hasil evaluasi menunjukkan masker mata hidrogel tidak mengalami perubahan organoleptis selama 12 minggu dan memiliki kemampuan menahan air yang baik. Selain itu, masker mata hidrogel memiliki kekuatan peregangan sebesar 4,0823 ± 0,6879 kgf/cm2 dan persen elongasi sebesar 200%. Masker mata hidrogel yang dihasilkan pada penelitian ini memiliki karakteristik dan stabilitas fisik yang baik sehingga diharapkan dapat digunakan sebagai sediaan perawatan kulit nutrakosmesetika.
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ABSTRACT
Purple passion fruit (Passiflora edulis) seed had known containing polyphenol which could prevent aging. Polyphenol content were extracted using 80% ethanol. The aim of this research was to obtain a hydrogel eye patch formula with good physical characteristic and stability. Hydrogel eye mask which contains 0.1% purple pasion fruit seeds extract was formulated with 3% alginate, 0.5% xanthan gum, and immersed at 0.5% calcium chloride solution for 60 minutes. Hydrogel eye mask physical characteristic and stability was evaluated by organoleptic observation, swelling index, consistency, tensile stregth, and elongation rate. The results showed that hydrogel eye mask was stable in colour and odour for 12 weeks and showed a good water holding capacity. In addition, hydrogel eye mask had tensile strength at 4.0823 ± 0.6879 kgf/cm2 and elongation rate at 200%. This research demonstrated that hydrogel eye mask formula has good physical characteristic and stability. Thus, it had potential to be used as nutracosmeceutical skin care product.