FORMULASI DAN UJI EVALUASI SEDIAAN LOTION *EXTRA VIRGIN OLIVE OIL* DAN *POMACE OLIVE OIL* KOMBINASI EKSTRAK BIJI PEPAYA (*Carica papaya* L.)

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ABSTRAK

Latar Belakang: *Extra virgin olive oil* (EVOO) dan *pomace olive oil* (POO) diperoleh melalui proses pengolahan yang berbeda sehingga dapat memberikan karakteristik fisik yang berbeda pada sediaan lotion. Biji pepaya (*Carica papaya* L.) mengandung senyawa fenolik dan flavonoid yang berpotensi dimanfaatkan sebagai bahan aktif alami. **Tujuan:** Penelitian ini bertujuan untuk memformulasikan ekstrak biji pepaya dalam sediaan lotion menggunakan *extra virgin olive oil* dan *pomace olive oil* serta mengevaluasi karakteristik fisik dan tingkat penerimaannya. **Metode**: Penelitian dilakukan secara eksperimental dengan enam formula yang mengandung ekstrak biji pepaya 1%, variasi konsentrasi pengemulsi 3%, 4%, dan 5%, bahan pengental 1%, 2%, dan 3%, serta *co-emulsifier* 0,5%, 1%, dan 1,5%. Evaluasi meliputi organoleptis, homogenitas, pH, daya sebar, daya lekat, viskositas, *cycling test*, dan uji hedonik. **Hasil:** Hasil penelitian menunjukkan bahwa ekstrak biji pepaya dapat diformulasikan dalam kedua jenis lotion. Jenis minyak memberikan perbedaan signifikan terhadap pH, daya sebar, daya lekat, dan viskositas. Lotion berbasis EVOO memiliki viskositas lebih tinggi dibandingkan POO, sedangkan formula F6 berbasis POO merupakan formula yang paling disukai panelis. **Kesimpulan:** Berdasarkan hasil tersebut, EVOO dan POO dapat digunakan sebagai fase minyak dalam formulasi lotion ekstrak biji pepaya dengan karakteristik fisik yang berbeda.

Kata kunci: Ekstrak biji pepaya, lotion, *extra virgin olive oil*, *pomace olive oil*, karakteristik fisik.

FORMULATION AND EVALUATION OF LOTION PREPARATIONS CONTAINING EXTRA VIRGIN OLIVE OIL AND POMACE OLIVE OIL COMBINED WITH PAPAYA SEED EXTRACT (Carica papaya L.*)*

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ABSTRACT

Background: *Extra virgin olive oil (EVOO) and pomace olive oil (POO) are obtained through different processing methods, which may result in different physical characteristics in lotion formulations. Papaya seeds (Carica papaya L.) contain phenolic compounds and flavonoids that have the potential to be used as natural active ingredients.* ***Objective:*** *This study aimed to formulate papaya seed extract into lotion preparations using EVOO and POO and to evaluate their physical characteristics and acceptability.* ***Methods:*** *This experimental study involved six formulations containing 1% papaya seed extract, with emulsifier concentrations of 3%, 4%, and 5%, thickener concentrations of 1%, 2%, and 3%, and co-emulsifier concentrations of 0.5%, 1%, and 1.5%. The evaluations included organoleptic properties, homogeneity, pH, spreadability, adhesiveness, viscosity, cycling test, and hedonic test.* ***Results:*** *The results showed that papaya seed extract could be formulated into lotions using both types of oil. Oil type had a significant effect on pH, spreadability, adhesiveness, and viscosity. The EVOO-based lotions had higher viscosity than the POO-based lotions, while formulation F6, which used POO, was the most preferred by the panelists.* ***Conclusion:*** *EVOO and POO can be used as oil phases in papaya seed extract lotion formulations, resulting in different physical characteristics.*

Keywords: *Papaya seed extract, lotion, extra virgin olive oil, pomace olive oil, physical characteristics.*