

ABSTRAK

AMELIA MEYLINDA. *Formulasi Lotion Dari Ekstrak Daun Tanaman Porang (*Amorphophallus Muelleri* Blume) yang Stabil Secara Farmaseutik.* (Dibimbing oleh apt. Hamsinah, S.Farm., M.Si dan apt. Vina Purnamasari M, S.Farm., M.Sc).

Daun tanaman porang (*Amorphophallus muelleri* Blume) memiliki potensi sebagai antioksidan karena memiliki kandungan senyawa flavonid yang dapat menangkal radikal bebas. Penelitian ini bertujuan untuk mengetahui formulasi serta mengevaluasi sediaan lotion dari ekstrak daun tanaman porang yang stabil secara farmaseutik. Penelitian ini menggunakan metode eksperimental yaitu ekstrak kental daun tanaman porang yang diperoleh dengan mengekstraksi daun tanaman porang dengan cara maserasi. Formulasi lotion dibuat dengan memvariasikan asam stearat dengan konsentrasi 10%, 11% dan 12,5% serta trietanolamin dengan konsentrasi 2%, 3% dan 4%. Serta dilakukan uji kestabilan fisik selama 10 hari penyimpanan yang meliputi organoleptik, pH, tipe emulsi, daya sebar, daya lekat, homogenitas, dan organoleptik. Semua sediaan lotion yang telah diujikan memenuhi kriteria masing-masing pengujian, kecuali pada pengujian daya lekat terdapat formula yaitu formula 1 yang tidak memenuhi kriteria, sehingga dapat disimpulkan bahwa ekstrak daun tanaman porang (*Amorphophallus Muelleri* Blume) dapat dibuat menjadi sediaan lotion yang stabil secara farmaseutik.

Kata Kunci: Daun tanaman porang, ekstrak, asam stearat, trietanolamin, lotion.

ABSTRACT

AMELIA MEYLINDA. *Pharmaceutical Stability of Lotion Formulation from Porang Leaf Extract (Amorphophallus Muelleri Blume).* (Supervised by apt. Hamsinah, S.Farm., M.Si and apt. Vina Purnamasari M, S.Farm., M.Sc).

The leaves of the *Amorphophallus muelleri* Blume plant, commonly known as porang, have garnered attention for their potential antioxidant attributes, attributable to their rich flavonoid content, which exhibits notable free radical scavenging properties. This study was designed to explore the formulation and evaluate the pharmaceutical stability of lotion preparations incorporating porang leaf extract. The experimental methodology entailed the extraction of a concentrated porang leaf extract through the maceration process. The lotion formulations were meticulously developed with variations in stearic acid concentrations (10%, 11%, and 12.5%) and triethanolamine concentrations (2%, 3%, and 4%). A comprehensive battery of physical stability tests was conducted over a 10-day storage period, encompassing assessments of organoleptic characteristics, pH levels, emulsion types, spreadability, adhesion, homogeneity, and sensory attributes. The outcomes of the experimentation yielded intriguing results. All tested lotion formulations demonstrated compliance with the set criteria, establishing their viability for pharmaceutical utilization. However, it is noteworthy that, among the formulations evaluated, one (designated as formula 1) did not meet the stipulated adhesion criteria, thus warranting further scrutiny and potential optimization. The present study underscores the potential of porang leaf extract as a promising candidate for the development of stable pharmaceutical lotion formulations, with implications for the cosmetics and skincare industry.

Keywords: Porang plant leaf, extract, stearic acid, triethanolamine, lotion.

