ABSTRAK

ALVINSYA ERASTUS MISSA. 2025, KARAKTERISASI SIMPLISIA DAUN AJERAN (*Bidens pilosa* L.) MENGGUNAKAN METODE PENGERINGAN *FOOD DEHYDRATOR,* KARYA TULIS ILMIAH, FAKULTAS FARMASI, UNIVERSITAS SETIA BUDI, SURAKARTA. Dibimbing oleh Apt. Fransiska Leviana, S.Farm., M.Sc.

Simplisia daun ajeran (*Bidens pilosa* L.) telah digunakan secara empiris dalam pengobatan tradisional untuk mengatasi berbagai keluhan, seperti luka, infeksi, gangguan pencernaan, dan demam. Penelitian ini bertujuan untuk melakukan karakterisasi awal terhadap mutu simplisia serbuk daun ajeran sebagai dasar pengembangan obat tradisional terstandar.

Penelitian dilakukan secara eksperimental di laboratorium dengan metode pengeringan menggunakan *food dehydrator*, dilanjutkan dengan penghalusan menjadi serbuk. Karakterisasi meliputi pengamatan makroskopis, mikroskopis, serta penetapan parameter mutu berdasarkan Farmakope Herbal Indonesia (FHI), yaitu susut pengeringan, kadar abu total, abu tidak larut asam, kadar sari larut air dan etanol.

Hasil pengujian menunjukkan karakteristik makroskopis berwarna hijau tua, bentuk bulat telur hingga lanset, tepi bergerigi, ujung meruncing, majemuk menyirip, rasa sepat, dan bau khas agak menyengat, mikroskopis menunjukkan adanya stomata anisositik, trikoma multiseluler non-kelenjar, dan berkas pembuluh bikolateral. Susut pengeringan tercatat 8,73%, kadar abu total 10,30%, abu tidak larut asam 1,85%, sari larut air 24,14%, dan sari larut etanol 11,01%. Hasil penelitian ini dapat menjadi dasar awal untuk penelitian lebih lanjut terhadap potensi daun ajeran sebagai bahan baku dalam skala industri farmasi.

Kata kunci: Karakterisasi, simplisia, *Bidens pilosa* L., *food dehydrator*

ABSTRACT

ALVINSYA ERASTUS MISSA. 2025, CHARACTERIZATION OF AJERAN LEAF SIMPLISIA (*Bidens pilosa* L.) USING FOOD DEHYDRATOR DRYING METHOD, SCIENTIFIC PAPER, FACULTY OF PHARMACY, SETIA BUDI UNIVERSITY, SURAKARTA. Supervised by Apt. Fransiska Leviana, S.Farm., M.Sc.

Simplicia of ajeran leaves (*Bidens pilosa* L.) has been used empirically in traditional medicine to treat various complaints, such as wounds, infections, indigestion, and fever. This study aims to conduct an initial characterization of the quality of ajeran leaf powder simplisia as a basis for developing standardized traditional medicine.

The research was conducted experimentally in the laboratory with a drying method using a food dehydrator, followed by pulverization into powder. Characterization includes macroscopic and microscopic observations, as well as the determination of quality parameters based on the Indonesian Herbal Pharmacopoeia (FHI), namely drying shrinkage, total ash content, acid insoluble ash, water and ethanol soluble juice content.

The test results showed macroscopic characteristics of dark green color, ovoid to lanceolate shape, serrated edges, tapered tips, pinnate compound, astringent taste, and a slightly pungent odor, microscopy showed the presence of anisocytic stomata, non-glandular multicellular trichomes, and bicolateral vascular bundles. Drying shrinkage was recorded at 8.73%, total ash content 10.30%, acid insoluble ash 1.85%, water soluble juice 24.14%, and ethanol soluble juice 11.01%. The results of this study can be an initial basis for further research on the potential of ajeran leaves as raw materials on a pharmaci industry scale.

Keywords: Characterization, simplicia, *Bidens pilosa* L., *food dehydrator*.