

INTISARI

Tanaman mimba (*Azadirachta indica* A.Juss) merupakan tanaman yang potensial untuk dikembangkan dibidang pengobatan. Dalam pemanfaatannya sebagai obat dan kosmetika, perlu diperhatikan identitas tanaman untuk menghindari pemalsuan.

Penelitian ini bertujuan untuk mengetahui morfologi maupun anatomi daun mimba, serta keberadaan senyawa alkaloid dalam daun mimba.

Penelitian ini termasuk jenis penelitian non eksperimental dengan tata cara analisis hasil menggunakan metode analisis deskriptif dan komparatif. Proses penelitian meliputi tiga tahap, yaitu perencanaan, pengambilan data, dan analisa deskriptif.

Pada pemeriksaan organoleptik, daun mempunyai bau lemah dan rasa pahit. Pada pemeriksaan makroskopik tampak adanya bagian paling khas dari daun mimba, yaitu bagian pangkal daunnya tidak simetris. Hasil pengamatan mikroskopis memperlihatkan adanya fragmen rambut penutup bersel tunggal, kristal kalsium oksalat bentuk roset dan prisma, butiran cair berwarna hijau yang berasal dari sel idioblas, dan stomata tipe anomositik. Panjang stomata daun mimba 49,50-54,00 μm , lebar stomata 36,67-40,00 μm . Jumlah stomata daun mimba 18 buah/ $0,098\text{mm}^2$. Indeks stomata daun mimba 9,85.

Uji identifikasi keberadaan senyawa alkaloid ekstrak etanol daun mimba dengan kromatografi lapis tipis menunjukkan ketidakpastian keberadaan alkaloid dalam daun mimba.

ABSTRACT

Mimba (*Azadirachta indica* A.Juss) was potential plants which could be developed in therapeutics, so that in its use as medicine and cosmetic, we needed to consider about the identity of the plants in order to prevent falsification.

The purpose of this research was to know about the morphology and the anatomy of mimba leaves, and also to know the existence of alkaloid content on mimba leaves.

This research was non-experimental research with descriptive and comparative analysis method as its result analysis system. The research process covered three stages, i.e, planning, data gathering and descriptive analysis.

On organoleptic testing, leaves had weak smell and bitter taste. On macroscopic testing seemed that there was the most special part of mimba leaves, i.e, the asymmetry root of mimba leaves. The microscopic observation result showed that there was single cell covered of trichome, prisma and roset of calcium oxalate crystal, green liquid particle which came from idioblast cell, and anomositic type of stomata. The length of stomata mimba leaves: 49,50-54,00 μm , the stomata wide: 36,67-40,00 μm . The number of stomata mimba leaves 18 pieces/0,098 mm^2 . Stomata index of mimba leaves: 9,85

Identification test with thin layer chromatography of ethanol extract of alkaloid chemical composition content of mimba leaves showed the uncertainty of alkaloid existence on mimba leaves.