**PENENTUAN NILAI SPF (*Sun Protection Factor*)**

 **EKSTRAK ETANOL BIJI DAN KULIT**

**MELINJO (*Gnetum gnemon L.*)**

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**ABSTRAK**

Tanaman melinjo merupakan tanaman yang telah banyak tersebar di Indonesia, tanaman melinjo dimanfaatkan sebagai sumber pangan seperti tepung dan emping melinjo. Biji dan kulit melinjo mengandung tanin, saponin dan flavonoid. flavonoid merupakan senyawa yang berkhasiat antioksidan yang dapat menginaktifkan radikal bebas seperti radiasi matahari. Melihat dari hal tersebut, dilakukan penelitian yang bertujuan untuk melihat nilai SPF dari ekstrak etanol biji dan kulit melinjo.

Penelitian ini merupakan penelitian eksperimental yang bertujuan untuk melihat nilai SPF dari ekstrak biji dan kulit melinjo dengan menggunakan parameter-parameter, Seperti karakterisasi simplisia meliputi: kadar air, kadar sari larut air, kadar sari larut etanol, kadar abu total, kadar abu tidak larut asam, skrining fitokimia, penentuan senyawa menggunakan spektrofotometri IR dan penentuan nilai SPF menggunakan spektrofotometri UV-Vis.

Hasil Karakterisasi simplisa biji dan kulit melinjo memiliki kadar air 10,67 ± 1,15% dan 7,34 ± 1,15%, kadar sari larut air 11,763 ± 1,05% dan 16,683 ± 1,85%, kadar sari larut etanol 16,08 ± 1,31% dan 21,763 ± 0,91%, kadar abu total 4,217 ± 0,25% dan 5,24 ± 0,29%, kadar abu tidak larut asam 0,87 ± 0,05 % dan 0,99 % ± 0,08 %. Ekstrak biji dan kulit melinjo positif mengandung senyawa flavonoid, alkaloid, tannin, saponin dan triterpenoid/ steroid. Ekstrak biji dan kulit melinjo identik flavonoid dengan adanya gugus C-H aromatik dan gugus OH. Nilai SPF tertinggi pada ekstrak biji melinjo  sebesar 44,881 ± 0,9 dan kulit melinjo 45,754 ± 1,18. Dapat disimpulkan bahwa ekstrak biji dan kulit melinjo dapat digunakan sebagai tabir surya dengan nilai SPF yang hampir sama.

***Kata kunci : Ekstrak, biji, kulit, flavonoid dan SPF***

***DETERMINING THE GRADE OF SPF (Sun Protection Factor) FROM THE EXTRACT OF SEEDS AND PEELS***

***OF GNETUM (Gnetum gnemon L.)***

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***ABSTRACT***

*Gnetum is known as the plant that have been widely spread in Indonesia, it is usually used as food sources such as flour andgnetum chips. Gnetumseeds and peels contain tannins, saponins and flavonoids. Flavonoids are antioxidant compounds that can activate free radicals such as solar radiation. Seeing from this, this study aims to see the SPF value of the ethanol extract of seeds and melinjo peels.*

*This research was experimental study that aimed to investiagte SPF contained inextract of gnetum seeds and peels by using parameters, such as characterization of simplicia including: water content, water soluble extract, ethanol soluble extract, total ash content, acid insoluble ash content , phytochemical screening, determination of compounds using IR spectrophotometry and determination of SPF values ​​using UV-Vis spectrophotometry.*

*The results ofcharacterization simplex of seeds and peels of gnetum has a water content of 10.67 ± 1.15% and 7.34 ± 1.15%, water soluble extracts 11.763 ± 1.05% and 16.683 ± 1.85%, ethanol soluble extracts 16.08 ± 1.31% and 21.763 ± 0.91%, total ash content 4.217 ± 0.25% and 5.24 ± 0.29%, acid insoluble ash content 0.87 ± 0.05% and 0 99% ± 0.08%. The extract of gnetum seed and peel positively contains flavonoids, alkaloids, tannins, saponins and triterpenoids / steroids. Seed and melinjo seed extracts are identical to flavonoids in the presence of aromatic C-H groups and OH groups. The highest SPF value in gnetum seed extract was 44.881 ± 0.9 and melinjo skin was 45.754 ± 1.18. It was concluded that the extract of gnetum seed and peel can be used as sunscreen with as almost as SPF level.*

***Keywords: Extracts, seeds, peels, flavonoids and SPF***