

**STANDARDISASI SIMPLISIA DAN EKSTRAK ETANOL  
DAUN ASAM KANDIS (*Garcinia cowa* Roxb.)**

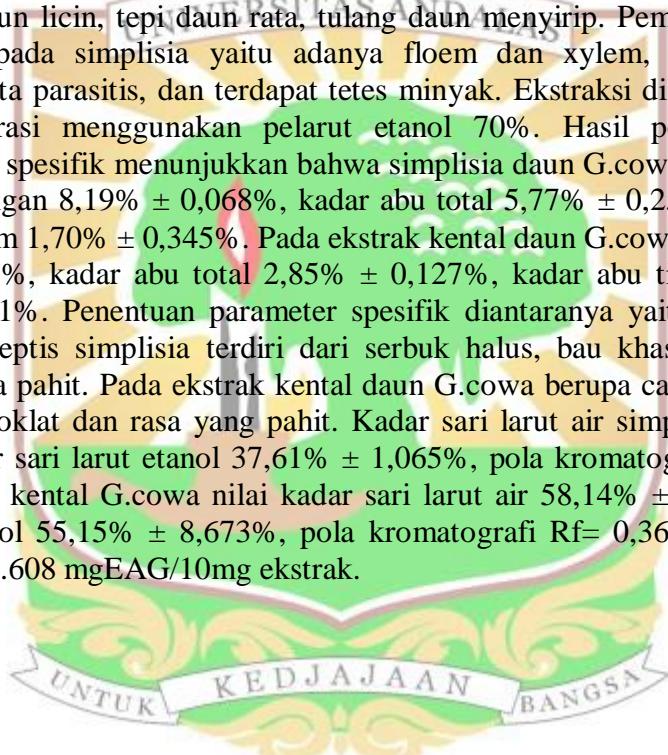
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## ABSTRAK

Daun *Garcinia cowa* Robx. yang dikenal juga dengan “Asam Kandis” diketahui memiliki kandungan senyawa kimia yang sekarang sudah banyak dimanfaatkan untuk mengatasi masalah kesehatan, yang salah satunya memiliki aktivitas sebagai antioksidan. Penggunaan bahan alam dalam suatu formulasi sediaan farmasi memerlukan proses standardisasi bahan baku untuk menjamin keseragaman mutu produk tersebut. Penelitian ini bertujuan untuk mengetahui standardisasi simplisia dan ekstrak etanol daun G.cowa. Pemeriksaan simplisia segar secara makroskopik memiliki ujung daun meruncing, pangkal daun runcing, permukaan daun licin, tepi daun rata, tulang daun menyirip. Pemeriksaan secara mikroskopik pada simplisia yaitu adanya floem dan xylem, kristal kalsium oksalat, stomata parasitis, dan terdapat tetes minyak. Ekstraksi dilakukan dengan metode maserasi menggunakan pelarut etanol 70%. Hasil penelitian untuk parameter non spesifik menunjukkan bahwa simplisia daun G.cowa memiliki nilai susut pengeringan  $8,19\% \pm 0,068\%$ , kadar abu total  $5,77\% \pm 0,254\%$ , kadar abu tidak larut asam  $1,70\% \pm 0,345\%$ . Pada ekstrak kental daun G.cowa memiliki nilai kadar air 8,24%, kadar abu total  $2,85\% \pm 0,127\%$ , kadar abu tidak larut asam  $1,14\% \pm 0,231\%$ . Penentuan parameter spesifik diantaranya yaitu organoleptis, untuk organoleptis simplisia terdiri dari serbuk halus, bau khas, warna coklat kehijauan, rasa pahit. Pada ekstrak kental daun G.cowa berupa cairan kental, bau khas, warna coklat dan rasa yang pahit. Kadar sari larut air simplisia  $33,77\% \pm 1,619\%$ , kadar sari larut etanol  $37,61\% \pm 1,065\%$ , pola kromatografi  $R_f = 0,35$ . Untuk ekstrak kental G.cowa nilai kadar sari larut air  $58,14\% \pm 5,196\%$ , kadar sari larut etanol  $55,15\% \pm 8,673\%$ , pola kromatografi  $R_f = 0,36$ . Kadar fenolat total  $2,528 \pm 0,608 \text{ mgEAG/10mg ekstrak}$ .



## ABSTRACT

The leafs of *Garcinia cowa* Roxb. locally known as “Asam Kandis” contain varieties of compounds which have been used to treat various health problems such as antioxidant. The use of natural product in for pharmaceutical formulation need standardization to guarantee their homogeneity and quality. This study was aimed to standardize simplisia and their ethanolic extract. Macroscopic study showed that fresh leafs had shape-oval, apex-acuminatus, base-acute, nervatio-pinnate, and leaf margin was entire with glabrous surface. The characteristic microscopic features of leaves were observed as xylem cells, phloem cells, calcium oxalate crystals, epidermis with paracytic stomata and oil glands. Extraction was carried out by using 70% ethanol-water. The study revealed non-specific parameter of *G.cowa* leafs that the drying loss was  $8.19\% \pm 0.068\%$ , the total ash value was  $5.77\% \pm 0.254\%$ , the acid insoluble ash content was  $1.70\% \pm 0.345\%$ . Ethanol extract *G. cowa* leafs had water-soluble compounds was 8.24%, the total ash value was  $2.85\% \pm 0.27\%$ , the acid insoluble ash content is  $1.14\% \pm 0.231\%$ . Specific parameter such as organoleptic, for *G.cowa* leafs there was subtle powder, a distinctive smell, greenish brown in colour, a bitter taste. Organoleptic extract *G.cowa* was thick extract, a distinctive smell, brownish colour, a bitter taste. Content of water-soluble extractable matter value of simplisia was  $33.77\% \pm 1.619\%$ , for ethanol-soluble extractable matter value of simplisia was  $37.61\% \pm 1.065\%$ , Rf value in thin layer chromatography was 0.35. Ethanol extract *G. cowa* leafs had water-soluble extractable matter value was  $58.14\% \pm 5.196\%$ , for ethanol-soluble extractable matter value was  $55.15\% \pm 8.673\%$ , Rf value in thin layer chromatography is 0.36, total phenolic content was  $2.528 \pm 0.608$  mgEAG/10mg extract.

