ABSTRACT

PHYTOCHEMICAL SCREENING AND ANTIMICROBIAL TESTING OF GARCINIA CELEBICA LEAVES EXTRACTS AGAINST STAPHYLOCOCCUS AUREUS, SHIGELLA DYSENTERIAE AND CANDIDA ALBICANS

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Lot of plants in Indonesia are being in used by citizen as traditional medicines, but only a few of those plants have been studied. In this research, extracts of *Carcinia celebica* leaves were studied for their chemical constituents and antibacterial activity by finding their minimum inhibition concentration against *Staphylococcus aureus* (Gram positive bacteria), *Shigella dysenteriae* (gram negative bacteria) and *Candida albicans* (fungus).

Leaves of Garcinia celebica obtained from Bogor Botanical Garden, plant identification was done at the same institution. Fresh leaves (1.5 kg) were air dried without direct exposure to sunlight and grinded to yield 577 gram of dried leave powder where 300 g of it was extracted by 4 x 300 ml of chloroform followed by 4 x 300 ml of methanol. The filtrates then evaporated in vacuo until semisolid mass were formed and yielded 21.92 g of dried chloroform extract and 44.89 g of methanol extract. Method applied for antimicrobial activity tests were agar dilution and agar well diffusion methods.

Results showed that both chloroform and methanol extracts possess antimicrobial activity with the minimum inhibition concentration was 500 μ g/ml against all the microbial tested. Phytochemical screeining showed that the extracts contain flavonoids, tannins and terpenes.

Keywords: Garcinia celebica, antimikroba, flavonoid, tanin, terpen.