

Antioxidant capacities of peel, pulp, and seed fractions of canarium odontophyllum Miq. fruit.

ABSTRACT

Antioxidant capacities of ethylacetate, butanol, and water fractions of peel, pulp, and seeds of *Canarium odontophyllum* Miq. (CO) were determined using various in vitro antioxidant models. Ethylacetate fraction of peel (EAFPE) exhibited the highest total phenolic (TPC), total flavonoid content (TFC), and antioxidant activities compared to pulp, seeds, and other solvent fractions. Antioxidant capacities were assayed by total antioxidant capability, 1,1-diphenyl-2-picryl hydrazyl (DPPH) radical activity, ferric reducing antioxidant power (FRAP), and hemoglobin oxidation assay. Total phenolic content of ethylacetate fractions was positively correlated with the antioxidant activity. This is the first report on the antioxidant activities from CO fruit fractions. Thus, EAFPE can be used potentially as a readily accessible source of natural antioxidants and as a possible pharmaceutical supplement.

Keyword: Antioxidant; *Canarium odontophyllum* Miq.'; Peels; Pulp; Seeds; Fruit