

**PENENTUAN KANDUNGAN ANTIOKSIDAN DAN FENOLIK TOTAL
DARI INFUSA DAUN TANAMAN FAMILI Myrtaceae SECARA
SPEKTROFOTOMETRI**

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PADANG

2021

INTISARI

Penentuan Kandungan Antioksidan dan Fenolik Total dari Infusa Daun Famili Myrtaceae secara Spektrofotometri

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Tanaman Famili Myrtaceae tergolong famili yang besar tersebar secara luas pada daerah tropis yang berpotensi sebagai antioksidan. Antioksidan memiliki peranan penting dalam menjaga kesehatan. Namun tanaman dari famili ini masih kurang dimanfaatkan. Penelitian ini bertujuan untuk mengetahui kandungan antioksidan total dan fenolik total dari infusa lima jenis daun Famili Myrtaceae yaitu daun salam (*Syzygium polyanthum*), daun jambak (*Syzygium malaccense*), daun jambu biji (*Psidium guajava*), daun jambu air (*Syzygium aqueum*) dan daun duwet (*Syzygium cumini*). Penentuan kandungan antioksidan total dilakukan dengan Metode MPM dan fenolik total dengan metode Folin Ciocalteu. Berdasarkan penelitian yang telah dilakukan kandungan antioksidan total dihitung sebagai mg asam askorbat masing-masing daun salam, daun jambak, daun jambu biji, daun jambu air dan daun duwet sebesar ($59,16 \pm 4,21$; $122,73 \pm 3,10$; $95,03 \pm 12,40$; $42,20 \pm 0,56$; $70,60 \pm 0,28$) mg AA/g DW. Fenolik total dari sampel berturut turut ($41,22 \pm 0,06$; $28,77 \pm 2,86$; $58,84 \pm 1,86$; $25,18 \pm 0,75$; $46,76 \pm 6,26$) mg GAE/g DW. Kandungan antioksidan total tertinggi terdapat pada ekstrak daun jambak sebesar $122,73 \pm 3,10$ mg AA/g DW, Sedangkan fenolik total tertinggi terdapat pada ekstrak daun jambu biji yaitu $58,84 \pm 1,86$ mg GAE/g DW.

Kata kunci: Famili Myrtaceae, antioksidan, fenolik total, metode MPM

ABSTRACT

Determination of Total Antioxidant and Phenolic Contents of Myrtaceae Leaf Infusion Using by Spectrophotometry

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The Myrtaceae family is classified as a large family that is widely distributed in the tropics which has the potential as an antioxidant. Antioxidants have an important role in maintaining health. However, plants from this family are still underutilized. This study aims to determine the total antioxidant and total phenolic content of the infusion of five types of leaves of the Myrtaceae family, namely bay leaves (*Syzygium polyanthum*), jambak leaves (*Syzygium malaccense*), guava leaves (*Psidium guajava*), water guava leaves (*Syzygium aqueum*) and leaves duwet (*Syzygium cumini*). Determination of total antioxidant content was carried out by the MPM method and total phenolic by the Folin Ciocalteu method. Based on research that has been carried out, the total antioxidant content calculate as mg of ascorbic acid for each bay leaves, jambak leaves, guava leaves, water guava leaves and duwet leaves were (59,16 ± 4,21; 122,73 ± 3,10; 95,03 ± 12,40; 42,20 ± 0,56; 70,60 ± 0,28) mg AA/g DW. Total phenolics of the samples were respectively (41,22 ± 0,06; 28,77 ± 2,86; 58,84 ± 1,86; 25,18 ± 0,75; 46,76 ± 6,28) mg GAE/g DW. The highest total antioxidant content was found in the jambak leaves extract 122.73 ± 3.10 mg AA / g DW. While the highest total phenolic was found in guava leaves extract, namely 58.84 ± 1.86 mg GAE /g DW.

Key words: Myrtaceae, antioxidant, total phenolic, MPM method