

**PEMANFAATAN POHON MANGROVE API-API (*Avicennia* spp.) SEBAGAI BAHAN PANGAN DAN OBAT**

(Utilization of Mangrove Tree Species Api-Api (*Avicennia* Spp.) as Materials for Food and Medicine)

**Cahyo Wibowo, Cecep Kusmana, Ani Suryani, Yekti Hartati, Poppy Oktadiyani**

Dep. Silvikultur, Fakultas Kehutanan IPB

**ABSTRAK**

Tujuan penelitian ini adalah mengidentifikasi dan mengkuantifikasi bahan dan zat yang terdapat didalam berbagai jaringan (buah / biji, daun, kulit biji, kulit batang, kayu, akar dan getah) dari 3 spesies mangrove (*Avicennia. marina*, *A. lanata* dan *A. alba*), yang punya potensi sebagai pangan dan obat. Sampel dari jaringan tanaman tersebut dikumpulkan dari Jakarta Utara, Bali dan Papua pada periode Juni sampai Agustus 2009. Jaringan tanaman tersebut, kemudian dianalisa secara kualitatif, semikuantitatif dan kuantitatif di laboratorium. Terdapat kandungan alkaloid, saponin dan glikosida dalam jumlah yang cukup tinggi dalam semua jaringan tumbuhan tersebut. Tannin terdapat pada daun, biji (buah), dan kulit biji, serta dalam jumlah yang rendah di batang, getah dan akar. Flavonoid terdapat dalam jumlah besar di kulit biji, kulit batang dan biji (buah), batang dan akar. Meskipun demikian, flavonoid terdapat dalam jumlah yang lebih kecil pada daun dan getah. Triterpenoid terdapat pada semua jaringan tanaman tersebut, terutama pada daun dan akar. Steroid tidak terdeteksi pada semua jaringan tersebut. Ekstraksi etanol terhadap daun *A. marina* mengidentifikasi 1,2 propadiene, naftalen, dimetil tetrametil suksinat, lucidol, Isofilokladen, dioxepane, dan naftol. Dilain pihak, ekstraksi heksana hanya mengidentifikasi 1,2 propadiene. Daun *Avicennia* menunjukkan kandungan protein, serat, karbohidrat dan mineral (Fe, Mg, Ca, K, Na) dalam jumlah yang cukup tinggi. Analisis juga dilakukan terhadap kandungan vitamin, lemak, kalori, serta asam amino pada daun dan biji (buah) tanaman *Avicennia*. Dapat disimpulkan bahwa daun berpotensi sebagai pakan, sedang biji (buah) berpotensi sebagai bahan pangan bagi manusia.

Kata kunci: *Avicennia*, analisis fitokimia, protein, karbohidrat, pakan.

**ABSTRACT**

The objective of this research were identifying and quantifying materials and substances occurring in various tissues (fruit / seed, leaves, seed coat, bark, wood, root, and sap) of three mangrove species (*Avicennia marina*, *A. lanata* and *A. alba*), which had potentials as food and medicine. Samples of those tissue materials were collected from North Jakarta, Bali and Papua during period from June to August 2009. The tissue materials were afterwards subjected to qualitative, semiquantitative and quantitative analysis in laboratory. Considerable amount of alkaloid, saponin and glycoside were found in all of those tissues.

Tannin occurred in leaves, seed (fruit), and seed coat; and in low amount in stems, sap and roots. Flavonoid occurred in large amount in seed coat, bark, seed (fruit), stems and roots. However, flavonoid occurred in lower amount in leaves and sap. Triterpenoid occurred in all of those tissues, mainly in leaves and roots. Steroids were not detected in all of those tissues. Ethanol extraction of *A. marina* leaves identified 1,2 propadiene, naphthalene, succinic dimethyl tetramethyl, lucidol, Isophyllocladene, dioxepane, and naphthol. On the other hand, hexane extraction identified only 1,2 propadiene. Leaves of the three *Avicennia* species had considerable amount of protein, fiber, carbohydrate, and minerals (Fe, Mg, Ca, K, Na). Analysis were also conducted for vitamin, fat, calorie, and amino acid content on the leaves and seed (fruit) of the *Avicennia* plants. It could be concluded that the leaves are potential for forage, while the seeds (fruits) of the *Avicennia* are potential for human food

Keywords : *Avicennia*, phytochemical analysis, protein, carbohydrate, forage.