

## **ABSTRAK**

### **PENILAIAN STATUS KESEHATAN HUTAN MANGROVE MENGUNAKAN TEKNIK *FOREST HEALTH MONITORING* (FHM)**

**Oleh**

**FERDY ARDIANSYAH**

Hutan mangrove berperan penting bagi ekosistem di sekitarnya. Hutan mangrove akan berfungsi dengan baik jika kondisi hutan mangrove sehat. Oleh sebab itu, perlu dilakukan penilaian kesehatan hutan untuk mengetahui status kesehatan hutan mangrove. Kondisi kesehatan hutan mangrove dapat diketahui melalui teknik pemantauan kesehatan hutan (*Forest Health Monitoring*-FHM). Penelitian ini bertujuan untuk mengetahui status kondisi kesehatan hutan mangrove di areal hutan mangrove Kesatuan Pengelolaan Hutan Lindung (KPHL) Gunung Balak, Kecamatan Pasir Sakti, Kabupaten Lampung Timur yang didominasi jenis *Avicennia marina*. Penelitian ini menggunakan teknik FHM dengan plot sampel berupa klaster-plot FHM. Jumlah klaster-plot FHM hutan mangrove ditentukan berdasarkan intensitas sampling sebesar 0,8 % dari luasan 296 ha; sehingga diperoleh enam klaster-plot FHM hutan mangrove. Objek penelitian, yaitu pada fase pohon yang merupakan bagian dari fase pertumbuhan pohon. Parameter yang digunakan adalah kondisi kerusakan pohon dan tajuk. Kondisi kerusakan

Ferdy Ardiansyah

pohon dianalisis melalui nilai kerusakan tingkat klaster (*cluster level index-CLI*) dan kondisi tajuk pohon dinilai melalui peringkat penampakan tajuk (*visual crown rating-VCR*) pada tingkat klaster-plot FHM. Status kondisi kesehatan hutan mangrove dianalisis berdasarkan nilai kesehatan hutan (NKH), kemudian dikategorikan menjadi lima kategori, yaitu ideal, bagus, sedang, jelek, dan buruk. Hasil penelitian menunjukkan bahwa status kondisi kesehatan hutan mangrove pada klaster-plot FHM 1 adalah ideal; klaster-plot FHM 2, 3, dan 6 adalah sedang, dan klaster-plot FHM 4 dan 5 adalah jelek. Dengan demikian, areal hutan mangrove KPHL Gunung Balak, Kecamatan Pasir Sakti, Kabupaten Lampung Timur berstatus ideal sebesar 17%, sedang sebesar 50%, dan jelek sebesar 33%.

**Kata kunci:** FHM, hutan mangrove, kesehatan hutan mangrove

## **ABSTRACT**

### **ASSESSMENT OF MANGROVE FOREST HEALTH STATUS USING FOREST HEALTH MONITORING (FHM) TECHNIQUE**

**By**

**FERDY ARDIANSYAH**

Mangrove forest have important role to its surrounding ecosystem. Mangrove forest will well function if its condition is healthy. Therefore, forest health assessment need to be done to determine the health status of the mangrove forest. The health condition of mangrove forest can be known by forest health monitoring (FHM). This research aimed to determine the mangrove forest health status in mangrove area of Gunung Balak Protection Forest Management Unit, Pasir Sakti sub-district, Lampung Timur district which dominated by *Avicennia marina*. This research used the FHM technique with sample plot of FHM cluster-plot. The amount of FHM cluster-plot was determined based on sampling intensity of 0,8% from 296 hectare areal; so that six FHM cluster-plot were obtained. The object of the research was phase of a tree, that was a part of the growth phase. The used parameter was the damage condition of tree and canopies. The damage condition of tree was analyzed by the cluster level index (CLI) and the condition of mangrove canopies was assessed by visual crown

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rating (VCR) at FHM cluster-plot level. The health status of mangrove forest was analyzed based on the value of forest health, then categorized into five categories, that were ideal, good, medium, bad, ugly and bad. The results showed that the health condition of mangrove forest on FHM cluster-plot 1 was ideal; FHM cluster-plot 2, 3, and 6 were medium and FHM cluster-plot 4 and 5 were ugly. Therefore, the mangrove forest areal in Gunung Balak Protection Forest Management Unit, Pasir Sakti sub-district, Lampung Timur district status was ideal in amount of 17 %, medium in amount of 50%, and ugly in amount of 33%.

**Keywords:** FHM, mangrove forest, the health of mangrove forest.