UNIVERSITAS
GADJAH MADA
**Evaluasi Jaringan Jalan Hutan Kayu Putih (Melaleuca cajuputi) di Bagian Daerah Hutan (BDH) Playen,
Kesatuan Pengelolaan Hutan (KPH) Yogyakarta**
Andreas Agung Wijaya, Ir. Ratih Madya Septiana, S. Hut., M.Sc, Ph.D. IPM. ; Ir. Hermudananto, S.Hut., M.Sc., IPM.
Universitas Gadjah Mada, 2026 | Diunduh dari http://etd.repository.ugm.ac.id/

EVALUASI JARINGAN JALAN HUTAN KAYU PUTIH (Melaleuca cajuputi) di BAGIAN DAERAH HUTAN (BDH) PLAYEN, KESATUAN PENGELOLAAN HUTAN (KPH) YOGYAKARTA

Andreas Agung Wijaya[1], Ratih Madya Septiana[2], Hermudananto[3]

INTISARI

Pembukaan Wilayah Hutan (PWH) merupakan upaya penyediaan jaringan jalan hutan sebagai infrastruktur dasar dalam kegiatan pengelolaan hutan produksi. Jaringan jalan hutan memegang peranan strategis dalam mendukung pemanenan hasil hutan bukan kayu, khususnya daun kayu putih (*Melaleuca cajuputi*) sebagai bahan baku minyak kayu putih. Penelitian ini bertujuan untuk mengidentifikasi karakteristik jaringan jalan hutan, mengevaluasi kondisi fisik jalan, serta menganalisis intensitas lalu lintas kendaraan di RPH Menggoran, BDH Playen, KPH Yogyakarta dengan luas areal 334.35 ha.

Pengumpulan data dilakukan melalui observasi lapangan dan wawancara dengan pihak pengelola. Analisis dilakukan secara kuantitatif deskriptif terhadap parameter karakteristik jaringan jalan meliputi kerapatan jalan (RD), jarak sarad (RS), jarak pikul rata-rata teoritis (JPRt), jarak pikul rata-rata terpendek (JPRp), jarak pikul rata-rata lapangan (JPRr), faktor koreksi jaringan jalan (*Vcorr*), faktor koreksi jalan sarad (*Tcorr*), faktor koreksi pembukaan wilayah hutan (KG), dan persentase pembukaan wilayah hutan (E%)

Hasil penelitian menunjukkan nilai RD = 90.25 m/ha; RS = 110.81 m; JPRt = 27,70 m; JPRp = 44,14 m; JPRr = 67,32 m; *Vcorr* = 1,59; *Tcorr* = 1,53; KG = 2.43; dan E% = 63% dengan kategori kurang baik. Kerusakan jalan yang ditemukan meliputi *cracking, rutting, potholes*, genangan air, dan gulma. Infrastruktur pendukung berupa gorong-gorong dan jembatan juga teridentifikasi dalam kondisi kurang baik. Intensitas lalu lintas menunjukkan rata-rata lalu lintas harian (LHR) sebesar 2.29 kendaraan/hari atau 0.57 kendaraan/jam dengan total 16 unit kendaraan bermotor. Rekomendasi penelitian mencakup perbaikan distribusi jaringan jalan, pemeliharaan infrastruktur jalan, dan peningkatan kualitas perkerasan jalan guna mengoptimalkan aksesibilitas areal produksi.

Kata Kunci: Pembukaan Wilayah Hutan, Jaringan Jalan, Karakteristik Jaringan Jalan, Kondisi Jalan Hutan, Intensitas Lalu Lintas

---

[1] Mahasiswa Fakultas Kehutanan UGM
[2] Staff Pengajar Fakultas Kehutanan UGM
[3] Staff Pengajar Fakultas Kehutanan UGM

UNIVERSITAS
GADJAH MADA
**Evaluasi Jaringan Jalan Hutan Kayu Putih (Melaleuca cajuputi) di Bagian Daerah Hutan (BDH) Playen,
Kesatuan Pengelolaan Hutan (KPH) Yogyakarta**
Andreas Agung Wijaya, Ir. Ratih Madya Septiana, S. Hut., M.Sc, Ph.D. IPM. ; Ir. Hermudananto, S.Hut., M.Sc., IPM.
Universitas Gadjah Mada, 2026 | Diunduh dari http://etd.repository.ugm.ac.id/

*EVALUATION OF FOREST ROAD NETWORK IN CAJUPUT (*Melaleuca cajuputi*) FOREST AT PLAYEN FOREST AREA DIVISION (BDH), YOGYAKARTA FOREST MANAGEMENT UNIT (KPH)*

Andreas Agung Wijaya[1], Ratih Madya Septiana[2], Hermudananto[3]

ABSTRACT

Forest Opening (PWH) refers to the provision of forest road networks, which serve as essential infrastructure for forest management and harvesting activities, particularly for non-timber forest products such as cajuput (Melaleuca cajuputi), the primary raw material for cajuput oil. The high harvesting intensity of cajuput leaves necessitates a road network that can reach the entire production area. This study aimed to identify forest road network characteristics, assess the physical condition of forest roads, and analyze traffic intensity at Menggoran Forest Resort (RPH Menggoran), BDH Playen, KPH Yogyakarta, covering a total area of 334.35 ha.

*Data were collected through field observation and interviews with relevant stakeholders. Analysis was conducted using a quantitative descriptive approach, measuring forest road network parameters including road density (RD), road spacing (RS), theoretical mean skidding distance (JPRt), shortest mean skidding distance (JPRp), actual mean skidding distance (JPRr), road network correction factor (V*corr*), skid road correction factor (T*corr*), forest opening correction factor (KG), and forest opening percentage (E%).*

*Results revealed that the forest road network characteristics at RPH Menggoran yielded RD = 90.25 m/ha, RS = 110.81 m, JPRt = 27.70 m, JPRp = 44.14 m, JPRr = 67.32 m, V*corr *= 1.59, T*corr *= 1.53, KG = 2.43, and E% = 63%, categorized as poor. Physical deterioration was observed across several road sections, including cracking, rutting, potholes, waterlogging, and encroachment by understory vegetation. Road infrastructure, including culverts and bridges, was similarly found to be in poor condition, and required immediate maintenance. Traffic intensity analysis indicated an average daily traffic (ADT) of 2.29 vehicles/day (0.57 vehicles/hour), with a total of 16 motorized vehicles recorded in total. Recommendations include improving the spatial distribution of the road network to cover the entire production area, maintaining roads and infrastructure regularly, and upgrading road surfaces.*

Keywords: Forest Opening, Road Network, Forest Road Network Characteristics, Forest Road Condition, Traffic Intensity.

---

[1] Student of the Faculty of Forestry UGM
[2] Lecture of the Faculty of Forestry UGM
[3] Lecture of the Faculty of Forestry UGM