

**KERUSAKAN TEGAKAN TINGGAL AKIBAT PEMANENAN KAYU
REDUCED IMPACT LOGGING DAN KONVENSIONAL DI HUTAN ALAM
TROPIKA (STUDI KASUS DI AREAL IUPHHK PT. INHUTANI II,
KALIMANTAN TIMUR)**

*Residual Stand Damage Caused by Conventional and Reduced Impact
Logging in the Tropical Natural Forest (A Case Study in Forest Concession
Areas of PT. Inhutani II, East Kalimantan)*

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Abstrak

Penelitian ini bertujuan untuk mengetahui kerusakan tegakan tinggal akibat pemanenan kayu dengan teknik *reduced impact logging (RIL)* di hutan alam tropika. Penelitian dilakukan di areal PT Inhutani II, Kalimantan Timur. Petak penelitian ini masing-masing 3 (tiga) plot permanen dengan ukuran masing-masing 100 m x 100 m. Plot-plot permanen/pengukuran diletakkan secara sistematis pada kedua petak penelitian sedemikian rupa sehingga mewakili tempat-tempat sebagai berikut: lokasi tempat pengumpulan kayu (TPN), di lokasi jalan sarad utama dan di lokasi jalan sarad cabang. Hasil inventarisasi tegakan menunjukkan bahwa potensi tegakan rata-rata pada petak pemanenan kayu konvensional dan RIL masing-masing sebesar 353,51 N/ha dan 362,67 N/ha. Jumlah kerusakan tegakan tinggal rata-rata akibat pemanenan kayu pada petak pemanenan kayu konvensional dan RIL masing-masing sebesar 134,67 N/ha (38,10 %) dan 85,33 N/ha (23,52 %). Hasil penelitian menunjukkan bahwa dengan diterapkan teknik pemanenan kayu RIL dapat mengurangi kerusakan tegakan tinggal tingkat tiang dan pohon sebesar 9,86 N/ha atau 36,61 % dari yang dihasilkan pada petak pemanenan kayu konvensional. Dengan demikian pemanenan kayu konvensional menyebabkan kerusakan tegakan tinggal lebih besar dibandingkan dengan teknik RIL.

Kata kunci: pemanenan kayu, RIL, tegakan tinggal, kerusakan, hutan alam

Abstract

This research examined the effect of reduced impact logging (RIL) to residual stand damages in natural tropical forest. A research was done at natural tropical forest of PT Inhutani II, East Kalimantan. The effect of reduced impact logging to residual stand were studied using the data of three plots with each size 100 m x 100 m are placed based on purposive sampling at landing, main skiddtrail and branch skiddtrail, respectively. The results of the research showed that the potency of commercial timber species in conventional logging and RIL were 353.51 N/ha and 362.7 N/ha. The number of residual stand damages caused by conventional logging and RIL were 134.67 N/ha (38.10 %) and 85.33 N/ha (23.52 %). Results of the research showed that reduced impact logging is reduced trees damages 9.86 N/ha (36.61 %) compared with conventional logging. These researches indicated that conventional logging in the tropical natural forest caused heavier damage on residual stand when compared with a reduced impact logging.

Keywords: logging, RIL, residual stand, damage, natural forest

atau 36,61 % dari yang dihasilkan pada petak pemanenan kayu konvensional.

Kerusakan yang terjadi akibat pemanenan kayu RIL lebih kecil bila dibandingkan dengan kerusakan yang terjadi pada petak pemanenan kayu konvensional.

SARAN

Melihat hasil penelitian ini maka penerapan pemanenan kayu RIL sudah seharusnya dilaksanakan oleh para pengusaha IUPHHK untuk mengurangi kerusakan hutan yang lebih parah.

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