

---

# ABOVEGROUND BIOMASS FOR ACACIA HYBRID PLANTATIONS (*Acacia auriculiformis*\**Acacia mangium*) AT DONG NAI PROVINCE

Tran Thi Ngoan<sup>1</sup>, Nguyen Tan Chung<sup>2</sup>

<sup>1</sup>*Vietnam National University of Forestry – Southern Campus*

<sup>2</sup>*Nong Lam University*

## SUMMARY

This article introduces the results of research on aboveground biomass for Acacia hybrid plantations from 2 to 10 years at Dong Nai province. The objectives of research are to analyze the biomass growth of the Acacia hybrid plantations in order to create a scientific basis for management and silvicultural systems. The aboveground biomass allometric equations of average tree are constructed from 162 sample trees. The aboveground biomass of Acacia hybrid plantations were established by combining biomass equations of average trees and density equations. Density of Acacia hybrid plantations from 2 to 10 years was collected from 81 sample plots with an size of 1,000 m<sup>2</sup>. In the data processing method, biomass equations were tested from 5 different equations (Korf, Power, Korsun-Strand, Drakin-Vuevski, and Gompertz). Research results showed that total above-ground biomass for Acacia hybrid plantations at the ages of 4, 6, 8, 10 were 55.3; 122.7; 190.1 and 241.7 tons/ha, respectively. The average increment of the total above-ground biomass for Acacia hybrid plantations at the ages of 4, 6, 8, 10 were 20.4; 23.8 and 24.2 tons/ha/year, respectively. Total above-ground biomass of acacia hybrid plantations has moved from the fast growing to the slow growing stage at the age of 6.

**Từ khóa:** Average tree, biomass, biomass equation, biomass productivity.

**Ngày nhận bài** : 08/10/2018

**Ngày phản biện** : 28/11/2018

**Ngày quyết định đăng** : 05/12/2018