
BIOMASS AND CO₂ SEQUESTRATION OF ACACIA HYBRID PLANTATION IN BA RIA VUNG TAU PROVINCE

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SUMMARY

The paper presents the results of biomass and CO₂ absorption of Acacia hybrid plantation in Ba Ria Vung Tau province. The data were collected on 6 typical sample plots with an area of 500 m² (20 m x 25 m) each with the planted ages from 2 to 6 years. The study calculated the total biomass, fresh and dry biomass, carbon stock and CO₂ accumulation capacity of Acacia hybrid stands in the study area. Analysis of the relationship between fresh biomass and dry biomass with forest structure variables. Research results show that the biomass and carbon stocks of Acacia hybrid vary with age. Total fresh biomass is from 28.8 tons/ha to 259.5 tons/ha; total dry biomass from 12.7 tons/ha to 131.2 tons/ha; total carbon stocks from 6.3 tons/ha to 65.61 tons/ha; annual CO₂ absorbed from 11.7 tons/ha/year to 40.1 tons/ha/year. Dry biomass and fresh biomass of Acacia hybrid are closely related to the diameter at the breast height and total height in the form of exponential and logarithmic functions.

Keywords: Acacia hybrid, biomass, CO₂ sequestration, plantation.

Ngày nhận bài : 04/3/2019

Ngày phản biện : 09/4/2019

Ngày quyết định đăng : 16/4/2019