CORE Provided by eSkripsi Universitas Andal

Diversity Of Plant Species And Estimating Carbon Stocks Above Ground In The Forests Of Mountain Chain The Western Padang City

Yastori*, Chairul* and Syamsuardi*Mansyurdin*, Tesri Maideliza*

*Laboratory of Plant Ecology Department of Biology, FMIPA Andalas Universitiy, Limau Manis Padang -25163 Correspondent :<u>yastori_1991@yahoo.com</u>

ABSTRACT

Indonesia has a vast forest area. The extent of Indonesia's forests is one of the natural resources are prone to damage due to human interests in meeting their needs. One example of the damage that often occurs when current is forest fires. Forest destruction accounts for 20-25% of global CO₂ emissions that contribute to climate change or global warming. Unspoiled forest with a diversity of plant species are long-lived and litter is a place to store a lot of carbon stocks (C) the highest. The aim of this study was to determine the diversity of plants and to determine the amount of carbon stock above ground level in the forests of the Bukit Barisan city of Padang, West Sumatra. For the calculation of tree biomass is calculated on a plot with a size of 20m x 20m, 10m x 10m pole, stake 5m x 5m and for perhiungan down plant biomass and litter on the plot with a size of 2m x 2m (National Standardization Agency, 2011). Biomass calculation using the formula of Ketterings *et al*, 2001). In the Forest Area Bukit Barisan, West Sumatra derived carbon content 32.734,99 ton.

Key words : forest, carbon, biomass.

