

THE CAPACITY OF CARBON ACCUMULATION OF THE PLANTED *Rhizophora apiculata* Blume POPULATIONS IN CAN GIO MANGROVE BIOSPHERE RESERVE, HO CHI MINH CITY

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Summary

More than 17,000 ha of planted *Rhizophora apiculata* has contributed to ecologically important Can Gio mangroves ecologically significant and environmentally friendly in responding to climate change. By quantifying the carbon contributes to calculate the specific absorbtion value of the *Rhizophora apiculata* populations. Data were collected from 150 plots of 500 m² (25 x 20 m) and felled 42 trees with diameter (D_{1,3} m) from small to large for biomass calculation and analysis carbon. The results show that the equation $Y = a \cdot X^b$ shows the relationship between the carbon and stem diameter. The average carbon stock in the Can Gio mangrove forest is 151.99 ± 46.14 tonnes C/ha. Forest stand aged class 8 (ages 38-42) with accumulated carbon stocks of 161.05 ± 40.46 tons C/ha; at the age class of 7 (aged 33-37) the accumulation was 189.07 ± 38.78 tons C/ha; at the age class of 6 (aged 28 - 32), the accumulation was 136.72 ± 46.08 tons C/ha; at the age class of 5 (aged 23 - 27) the accumulation was 134.81 ± 42.34 tones C/ha; at the age class of 4 (aged 18 - 22) the accumulation was 138.34 ± 40.45 tons C/ha. The result will be a reference for calculating payments for forest environmental services in future.

Keywords: *Rhizophora apiculata*, Can Gio, carbon sequestration.