

THE RESULTS SHOW THAT THE SOIL ENVIROMENT AFFECTS THE GROWTH AND DEVELOPMENT OF AVICENNIA OFFICINALIS TREES IN MANGROVES THE ECOLOGICAL SUB - ZONES IN WESTER SEA MEKONG DELTA

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Summary

Research results in this subject include research on basic soil properties including some physical properties of soil (mechanical composition of sand, meat, clay), soil chemical composition (total salt content soil pH, organic matter, carbon, NH_4^+ , NO_3^- , total phosphorus, phosphorus, potassium and potassium). The results showed that in sandy forest, the composition of sand varies from 2.12% to 60.70%, meat from 21.46% to 46.44%, clay content from 17.78% to 51% 45%; chemical composition as total dissolved salt from 5.66% to 11.07, soil pH from 6.85% to 8.2%, soil EC from 8.84% to 17.3%, organic matter from 4, From 24% to 7.58%, from 2.46% to 7.58%, total phosphorus from 0.03 to 0.06%, phosphorus from 3.02% to 11.42% 67% - 1.41%, total potassium from 0.14% - 0.27%. For characteristic of mangrove as: density of trees from 2450 trees / ha - 6100 trees / ha, height H (m) from 5.76m - 8.22 trees / ha, stem diameter D1, 3m from 6.85m - 10.97m, the canopy section from 5.23m^2 - 11.81m^2 , growth grade (He) from 3.11/5 - 3.63/5; The growth of the *Avicennia officinalis* had density as 1190 plants / ha - 2750 trees/ha, H(m) from 5.80m - 8.24m, D1.3m from 6.63cm - 13.90cm, Gt m^2 from 4.88m^2 - 8.29m^2 , He from 2.63/5 - 3.92/5. Through the relationship of soil environment such as sand, clay, meat relative to height, growth; pH, organic matter, NH_4^+ , NO_3^- relative to density, height, diameter, canopy area, growth factor, these factors affect density, height, stem diameter, different growth levels in different ecological sub-zones of western Vietnam.

Key words: *Impact of soil properties, growth and development of mangrove forests, Avicennia officinalis trees, ecological sub-zones, Mekong Delta.*