PRODUCTIVITY OF EPIPHYTIC RHIZOCLONIUM CRASSIPELITUM AND BOSTRYCHIETUM ASSOCIATION ON THE PNEUMATOPHORES OF AVIOENNIA OFFICINALIS DURING THE WET SEASON IN THE MANGROVE FOREST RESERVE PAGBILAO (PHILIPPINES)

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The green alge R. crassipelitum occurred on the pneumatophores of A. officinalis in the upper forest while the red algae forming the Bostrychietum association occurred on the pneumatophores in the creeks, as described by Post (1966).

Six, 1 m^2 areas were selected from the creeks and the upper forest, where pneumatophores were found and in each quadrat, 5 pneumatophores that had even growth of algae were marked. The algae growing on one half of the pneumatophores was scrapped out lengthwise using a pen knife and the other half left to be collected after a month. The dried samples were weighed and their chlorophyll content determined. This study was conducted from June to August in 1982 and 1983.

The average daily production values for R. crassipelitum and Bostrychietum association were 5.48 $mgC/m^2/day$ and 5.51 $mgC/m^2/day$ respectively. The average chlorophll a production of R. crassipelitum was 70.9 $ug/m^2/day$ and for Bostrychietum association it was 23.0 $ug/m^2/day$. The increase in biomass and chlorophyll a was found to be negatively ($P < .05$) correlated to rainfall while with increased temperature production also increased, though not significantly ($P > .05$).

Reference:

Post, E.1966. Bostrychietum auf den Philippinen. Hydrobiologia. 27; 344-351.