

NUTRIENT CONTRIBUTION THROUGH THE LITTERFALL  
IN THE MANGROVES OF PAGBILAO, PHILIPPINES

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Out of the 31 mangrove plant species listed for the Philippines (Brown & Fisher, 1928), the species of Avicennia, Rhizophora, Lumnitzera, Ceriops, Sonneratia, Bruquiera, Acanthus, Derris and Aegiceras corniculatum, Excoecaria aqallocha, Nypa fruticans, Scyphiphora hydrophyllacea, and Xylocarpus granatum were common in the Mangrove Reserve of Pagbilao. Rhizophora spp. and Nypa fruticans occurred along the muddy banks. Pure stand of Avicennia in patches occurred in the supra-tidal zone.

From 10 litter baskets placed perpendicular to each other it was found that the annual litter production was 934 g dry wt m<sup>-2</sup> comparable to those of Thailand (Aksornkhae, 1980) and Puerto Rico (People et al 1974). Leaves contributed to the bulk of the litter. Most species flowered during the dry season. The annual contribution of nitrogen, phosphorus, and potassium were 656 g m<sup>-2</sup>, 83 g m<sup>-2</sup>, and 487 g m<sup>-2</sup> respectively. The overall annual elemental contribution from the litter decreased in the following order.

Na>Ca>N>K>Mg>p

References

- Aksornkhae, S. (1980). Nutrient cycling in mangrove forest in Thailand. Asian Symposium on mangrove environment: Research and Management K.L., Malaysia
- W.H. Brown and Fisher, A.F. (1928) *Philippine mangrove swamps* Bull. No. 17, Dept. of Agric. and Nat. Res. Bureau of Forestry, Philippines. 132 pp
- Poole, D.J., Lugo A.E. and Sredaker, S.C. (1974) Litter production in mangrove forests of Southern Florida and Puerto Rico. In Proc. Int. Symp. on Biology and Management of mangroves. eds. G. Walsh, S. Sredaker and H. Teas Vol. 1 pp 213-237

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