The effects of latitude on mangroves inferred from forest structure and productivity in the Ryukyu archipelago

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Mangrove is one of the unique ecosystems in subtropical and tropical coastal regions. Mangroves provide various ecosystem services, such as wood production, supporting coastal food webs and nutrient cycles in adjacent coastal ecosystems, carbon accumulation, trapping sediment and tsunami reduction. On the other hand, mangroves are one of the world's most threatened tropical and subtropical ecosystems and are being degraded in most countries mainly caused by anthropogenic activities and unsustainable exploitation. Ecology in plant production can give an insight into the basic mechanism supporting the ecosystem services with a viewpoint from forest structure and function.
This presentation focuses on the structure and productivity of mangroves around the Ryukyu Archipelago where the forest structure and function change drastically along a latitude since the study region is located around the northern distribution of mangroves. The effects of latitude on mangroves in East Asia will be discussed with some results based on the field researches conducted in the Ryukyu Archipelago.

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