Research Article

Impact of salinity on above ground biomass and stored carbon in a common mangrove *Excoecaria agallocha* of Indian Sundarbans

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Published: July 01, 2013, Received: April 04, 2013
AJBBL 2012, Volume 02: Issue 02 Pages 01-11 Accepted: May 31, 2013

ABSTRACT

The above ground biomass (AGB) and carbon stock of *Excoecaria agallocha* (a common mangrove plant species) were estimated in western and central Indian Sundarbans for five successive years (2005 – 2010). The two sectors are drastically different with respect to salinity on account of massive siltation that prevents the flow of fresh water of the River Ganga to the central sector of Indian Sundarbans. The biomass and carbon content of the above ground structures (stem, branch and leaf) of the species vary significantly with locality ($p<0.01$), the values being more in the high saline central sector on account of higher stem biomass. The tolerance of *Excoecaria agallocha* to high saline environment of lower Gangetic delta is confirmed.