

Biogeosciences Discuss., community comment CC1 https://doi.org/10.5194/bg-2021-255-CC1, 2021 © Author(s) 2021. This work is distributed under the Creative Commons Attribution 4.0 License.

## **Comment on bg-2021-255**

Md Nabiul Islam Khan

Community comment on "Predicting mangrove forest dynamics across a soil salinity gradient using an individual-based vegetation model linked with plant hydraulics" by Masaya Yoshikai et al., Biogeosciences Discuss.,

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Excellent work on an individual-based model for physiological representation of mangrove growth under the impact of soil salinity ranges.

Figure 7. Comparison of field-measured and modeled (a) mean DBH and (b) AGB of R. stylosa and B. gymnorrhiza along with soil salinity gradient. How to confirm that the observed pattern is ONLY due to salinity? What about other driving force to make this pattern?

Figure 6. Temporal dynamics in above-ground biomass (AGB). The scenario (d) shows a low AGB but still showing a reasonable LAI in 100 years simulation. This low AGB doesn't correspond to Figure 5, where vegetation cover indicates a high AGB.