Foliar Water Uptake Capacity in Six Mangrove Species

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Figure legends – Supplementary material

Figure S1. (a) Detail of the Ashtamudi Lake (Kerala, India) with the sample location of the five studied mangrove species indicated by a red circle with radius 500 m. Scale bar = 0.5 km. **(b)** Overview of the entire Ashtamudi Lake with the sample location indicated by a red circle. Scale bar = 2.5 km.

Figure S2. Difference in leaf water content (ΔLWC; %) of leaves of different mangrove species. Box plot midlines are medians, box edges show first and third quartiles with whiskers representing minimum and maximum values. Circles indicate outliers in the dataset. Letters at the top of box plots indicate significant ($p < 0.05$) differences among groups based on Tukey's comparisons, for which data of ΔLWC were log-transformed. Abbreviations: *A.c. = Aegiceras corniculatum*, *A.m. = Avicennia marina*, *B.c. = Bruguiera cylindrica*, *B.g. = Bruguiera gymnorhiza*, *S.a.= Sonneratia alba, S.c. = Sonneratia caseolaris.*

Figure S3. Results of the additional submersion experiment on leaves of *Avicennia marina*. Collected leaves were put in a ziplock bag containing exhaled air and moist paper tissue. After a period of one hour in the bag, water potential of 15 leaves was measured and FWU capacity was determined on 15 other leaves with the submersion experiment of Limm et al. [14]. The same was done with 30 leaves that had been in the bag for four hours. Parameters studied: **(a)** foliar water uptake (FWU) capacity, and **(b)** leaf water potential (Ψ_{leaf}). Box plot midlines are medians, box edges show first and third quartiles with whiskers representing minimum and maximum values. Circles indicate outliers in the dataset. Letters at the top of box plots indicate

differences of significance ($p < 0.05$) among groups, resulting from a Wilcoxon test for FWU

capacity and from a t-test for water potential.

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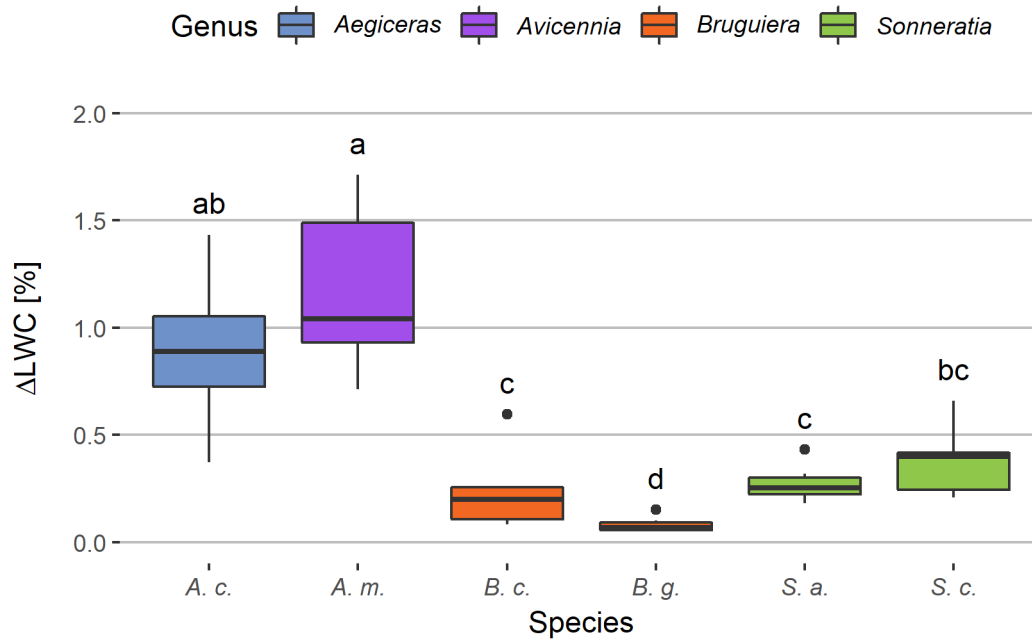
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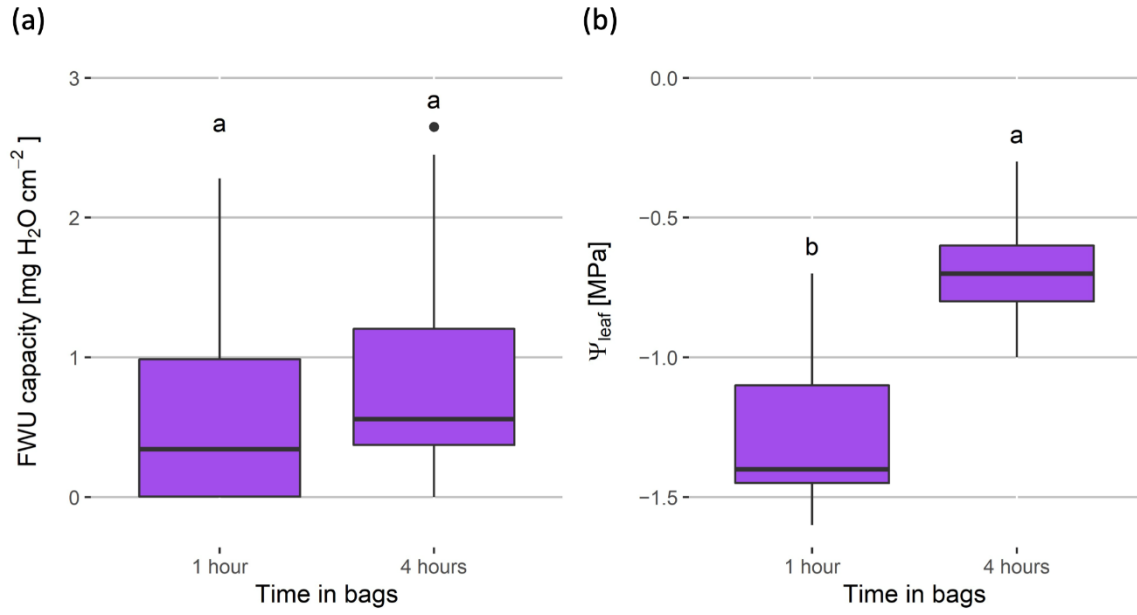
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