## DATA PAPER



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## Comprehensive dataset of mangrove tree weights in Southeast Asia

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Abstract We assembled a dataset tabulating the weights of Thai and Indonesian mangrove trees that we measured between 1982 and 2001. We selected four Thai study sites in Phang Nga, Ranong, Satun, and Trat Provinces and one site in eastern Indonesia on Halmahera Island in Maluku Province. The stands in Ranong Province and on Halmahera Island were in primary forests with data collected in the 1980s and the remaining stands were in secondary forests with data collected later. We collected 124 tree samples from ten species (Avicennia alba, Bruguiera cylindrica, B. gymnorrhiza, Ceriops tagal, Rhizophora apiculata, R. mu-

The complete data set for this abstract published in the Data Paper section of the journal is available in electronic format in Ecological Research Data Paper Archives at <a href="https://db.cger.nies.go.jp/JaLTER/ER\_DataPapers/archives/2016/ERDP-2016-07">https://db.cger.nies.go.jp/JaLTER/ER\_DataPapers/archives/2016/ERDP-2016-07</a>.

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cronata, Sonneratia alba, S. caseolaris, Xylocarpus granatum, and X. moluccensis) and measured the root weights of 32 individuals of nine species (A. alba, B. cylindrica, B. gymnorrhiza, C. tagal, R. apiculata, R. mucronata, S. alba, S. caseolaris, and X. granatum). All sampled trees were subjected to a standardized protocol to obtain aboveground weights. The trunks were divided into horizontal segments from which the leaves and branches were collected separately. Roots were collected by winching them out of the ground, by trench digging, or by complete excavation. Thus, we were able to compile the weights of the trunk, branches, leaves, and roots of each tree sampled. Aerial roots were included in root weight measurements, although they were collected above ground. We compiled separate lists of trunk diameters, trunk heights, heights of the lowest living branches, and the heights of aerial roots on the trunks of trees in different size categories. Our dataset includes a wide range of tree sizes (maximum trunk diameter 48.9 cm), geographical locations (1°10'N-12°24′N, 98°32′E–123°49′E) and organ weights (trunks, branches, leaves, and roots), and therefore should prove useful in future biomass studies of mangrove forests.

**Keywords** Allometry · Biomass · Branch weight · Leaf weight · Mangroves · Root weight · Southeast Asia · Tree dimensions · Trunk volume · Trunk weight

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