Supplementary Material

Short-term effects of rice straw biochar on hydraulic properties and aggregate stability of an Acrisol

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Supplementary Information



Fig. S1. Fits of the Van Genuchten (1980) moisture retention function to the observed average soil water retention data for the various biochar treatments. C, B10, and B20 denote control treatment, biochar 10 t ha⁻¹ and biochar 20 t ha⁻¹, respectively, and C_{fit} , B10_{fit} and B20_{fit} denote the fitted Van Genuchten moisture retention function for C, B10, and B20. The RMSE values represent the root mean squared error of the fitted Van Genuchten function for the treatments.



Fig. S2. Average soil cumulative infiltration of the various treatments and the fitted curves of Philip (1957) infiltration model (A) and the corresponding infiltration rate (B) curve. C, B10, and B20 denote control treatment, biochar 10 t ha⁻¹ and biochar 20 t ha⁻¹, respectively, and C_{fit} , B10_{fit} and B20_{fit} denote the fitted Philip infiltration model for C, B10, and B20. The sorptivity (S) values from the fitted model are 47.9 cm d^{-1/2}, 95.6 cm d^{-1/2}, and 66.1 cm d^{-1/2} for C, B10, and B20, respectively.