



**Supplemental Fig. 1.** Length distribution of adventitious roots with an ROL barrier in rice (cv. Nipponbare) under stagnant conditions. Methylene blue was used to evaluate ROL barrier formation in roots, as described in Ejiri and Shiono (2019). Roots that had white basal regions (i.e., no oxygen leakage) and blue root tips (i.e., leaking oxygen) were judged to have an ROL barrier. The percentage of roots that formed an ROL barrier are plotted based on root length. All roots in eight plants were used for this assessment. The plants were grown in an aerated nutrient solution for eight days and then transferred into a deoxygenated stagnant nutrient solution for 2-3 weeks.