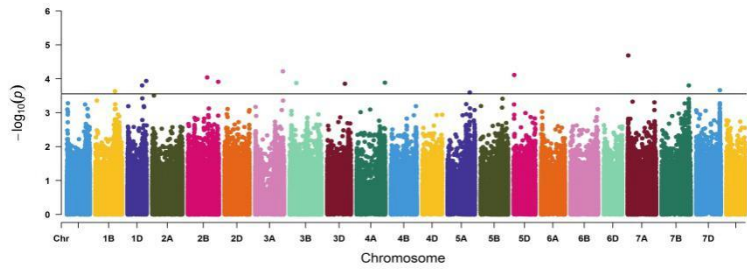
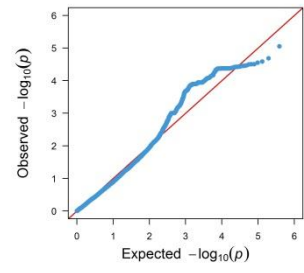


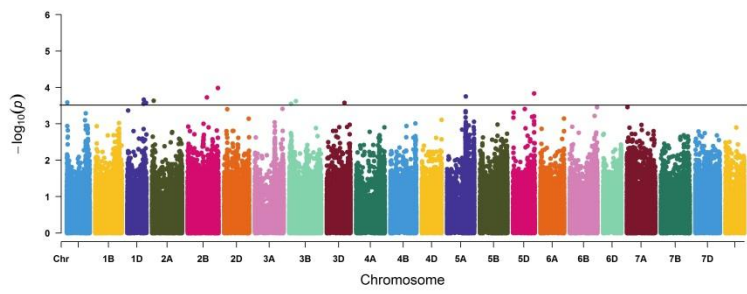
IHC-TRL



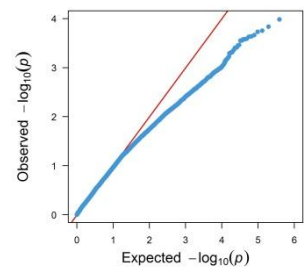
IHC-TRL



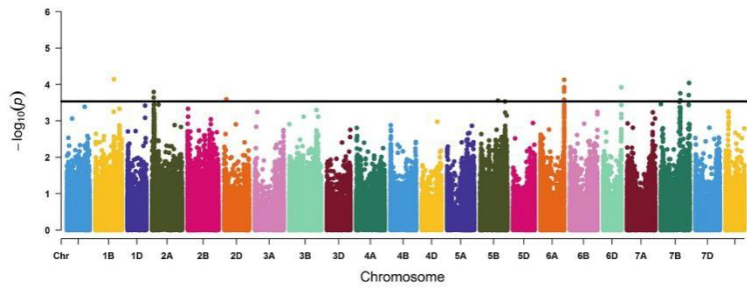
IHC-TRA



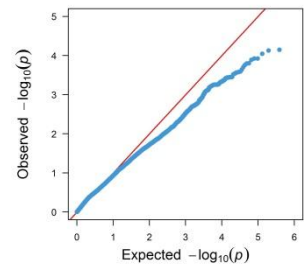
IHC-TRA



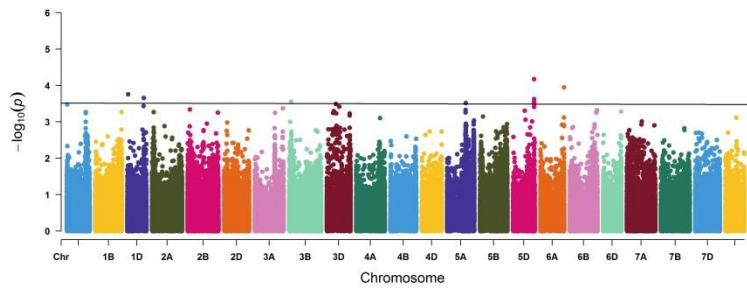
IHC-ARD



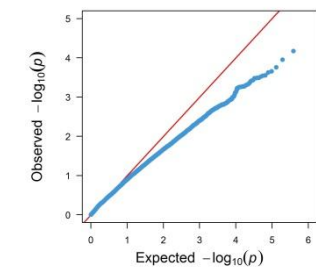
IHC-ARD



IHC-TRV



IHC-TRV



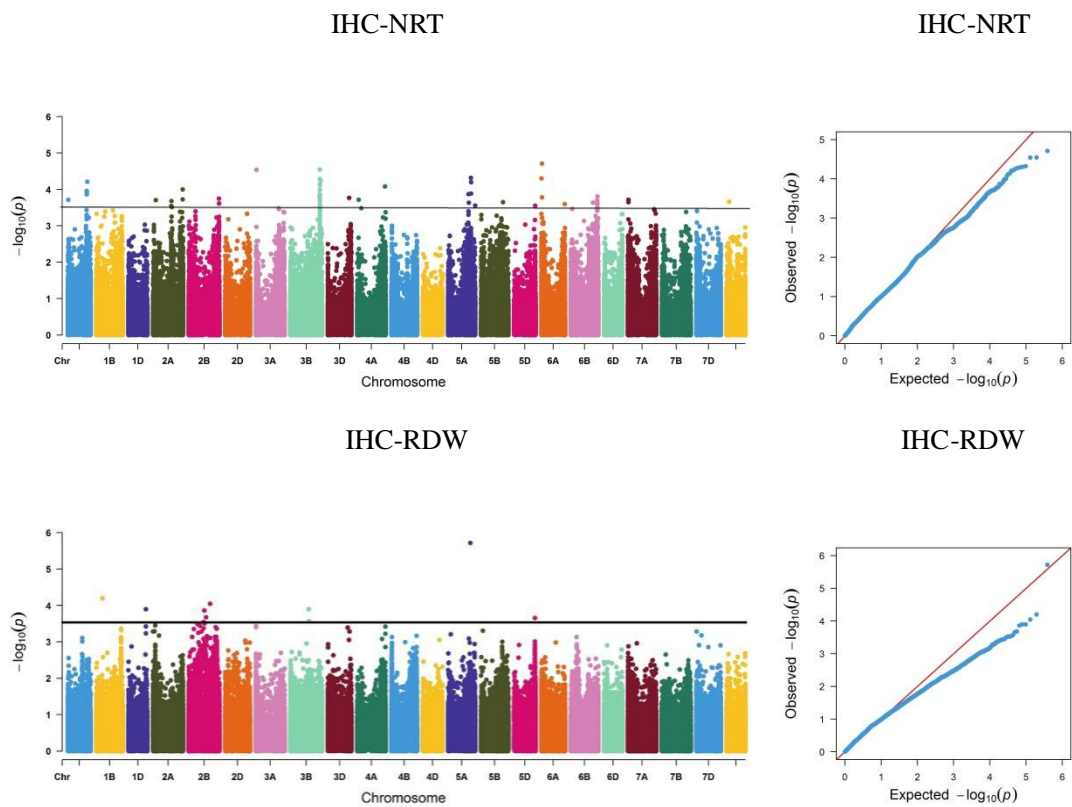
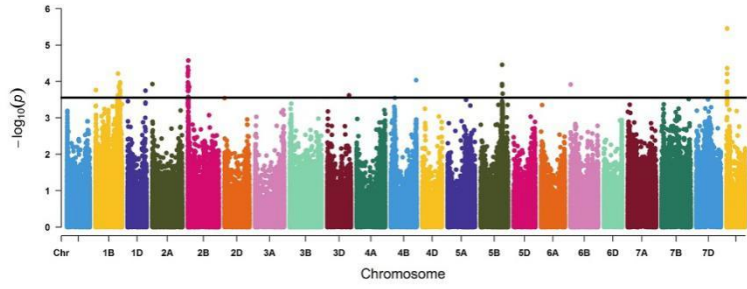
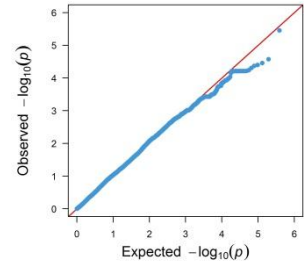


FIGURE S4-1 Manhattan and QQ-plots for six root traits in indoor hydroponic culture (IHC).

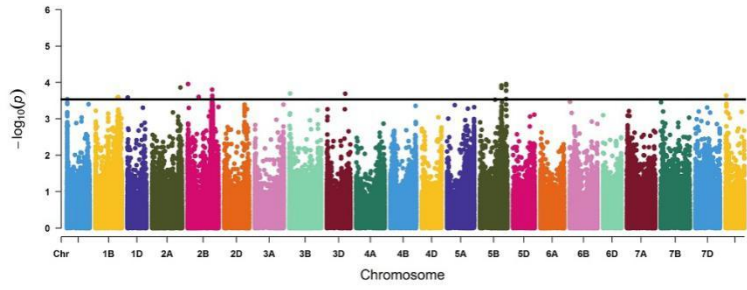
OHC-TRL



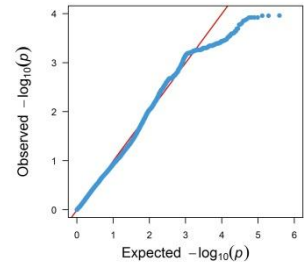
OHC-TRL



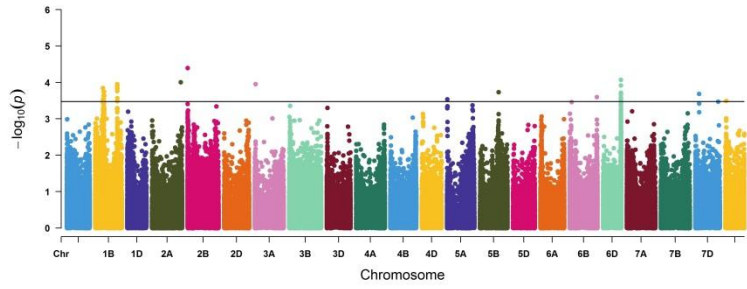
OHC-TRA



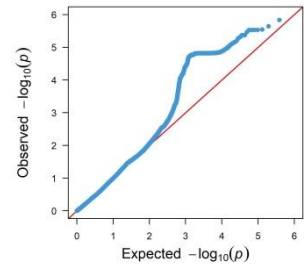
OHC-TRA



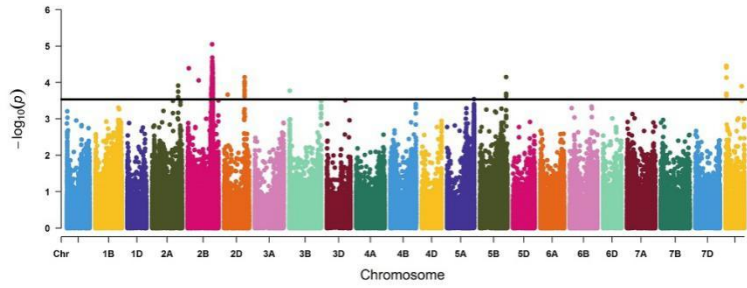
OHC-ARD



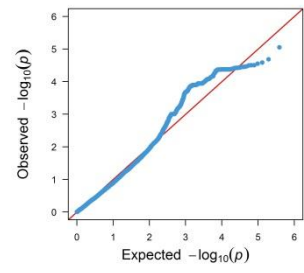
OHC-ARD



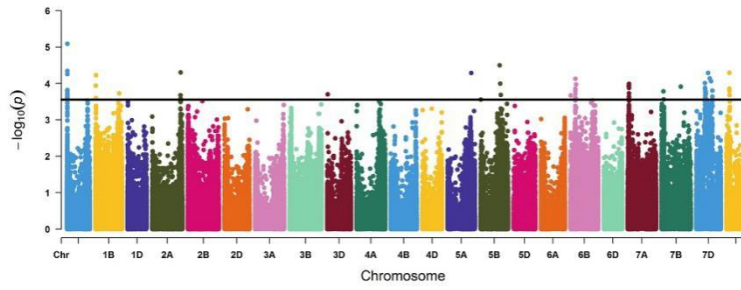
OHC-TRV



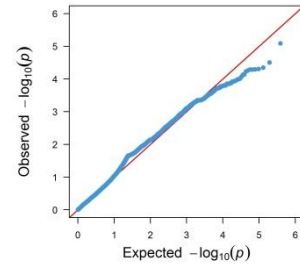
OHC-TRV



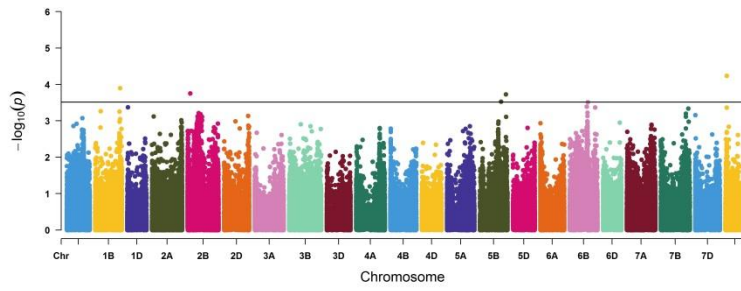
OHC-NRT



OHC-NRT



OHC-RDW



OHC-RDW

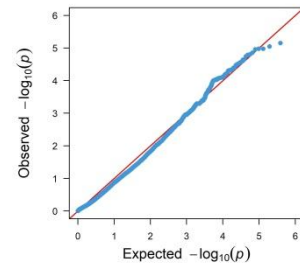
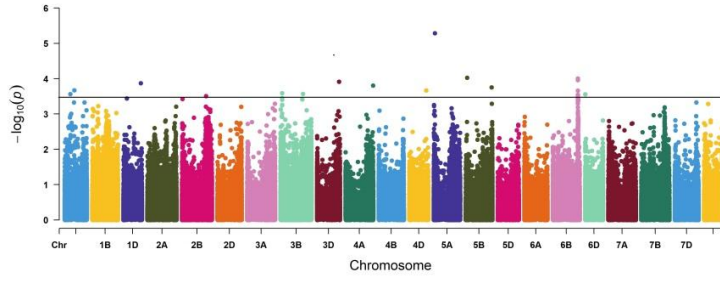
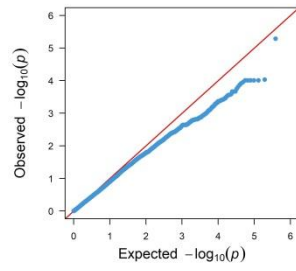


FIGURE S4-2 Manhattan and QQ-plots for 6 root traits in outdoor hydroponic culture (OHC).

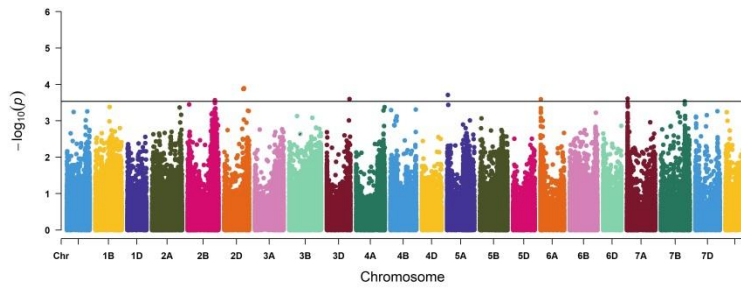
OPC-TRL



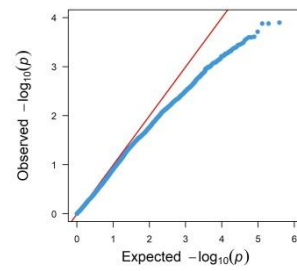
OPC-TRL



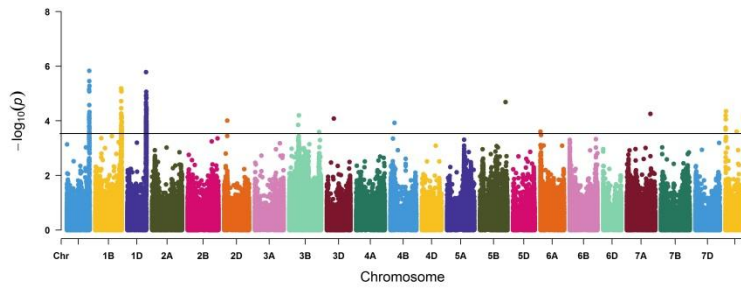
OPC-TRA



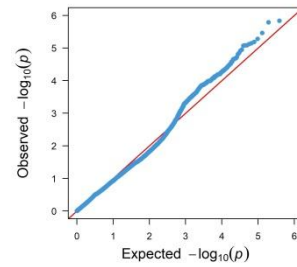
OPC-TRA



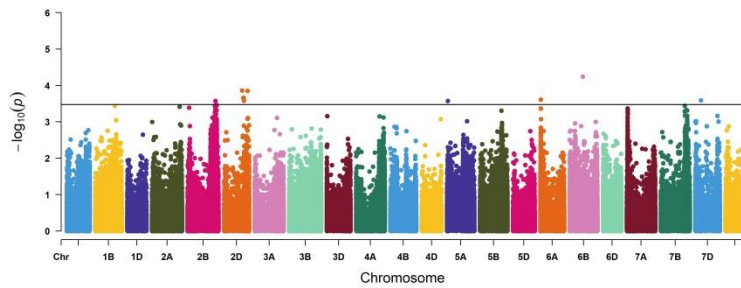
OPC-ARD



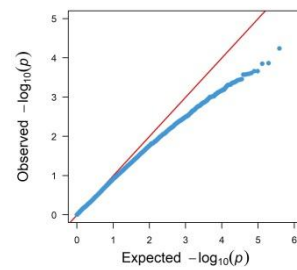
OPC-ARD



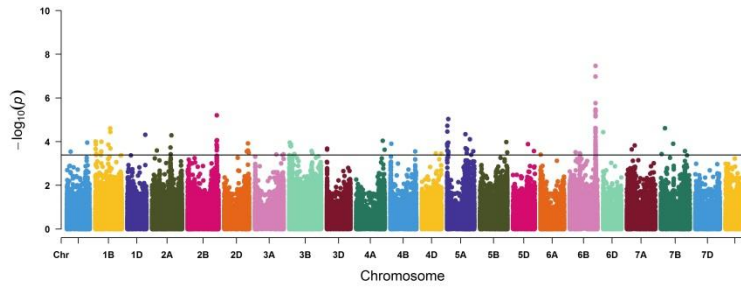
OPC-TRV



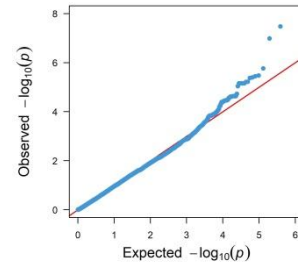
OPC-TRV



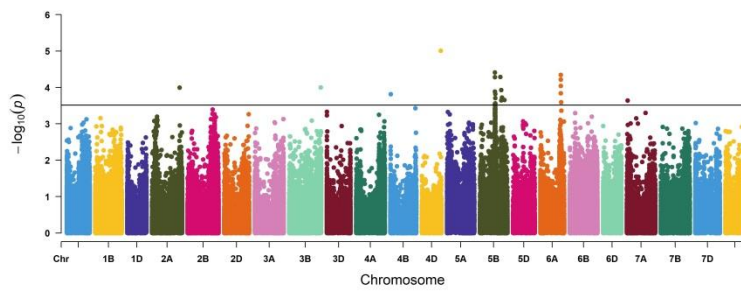
OPC-NRT



OPC-NRT



OPC-RDW



OPC-RDW

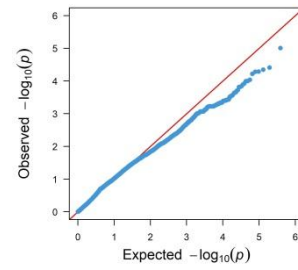


FIGURE S4-3 Manhattan and QQ-plots for root traits under outdoor pot culture (OPC).