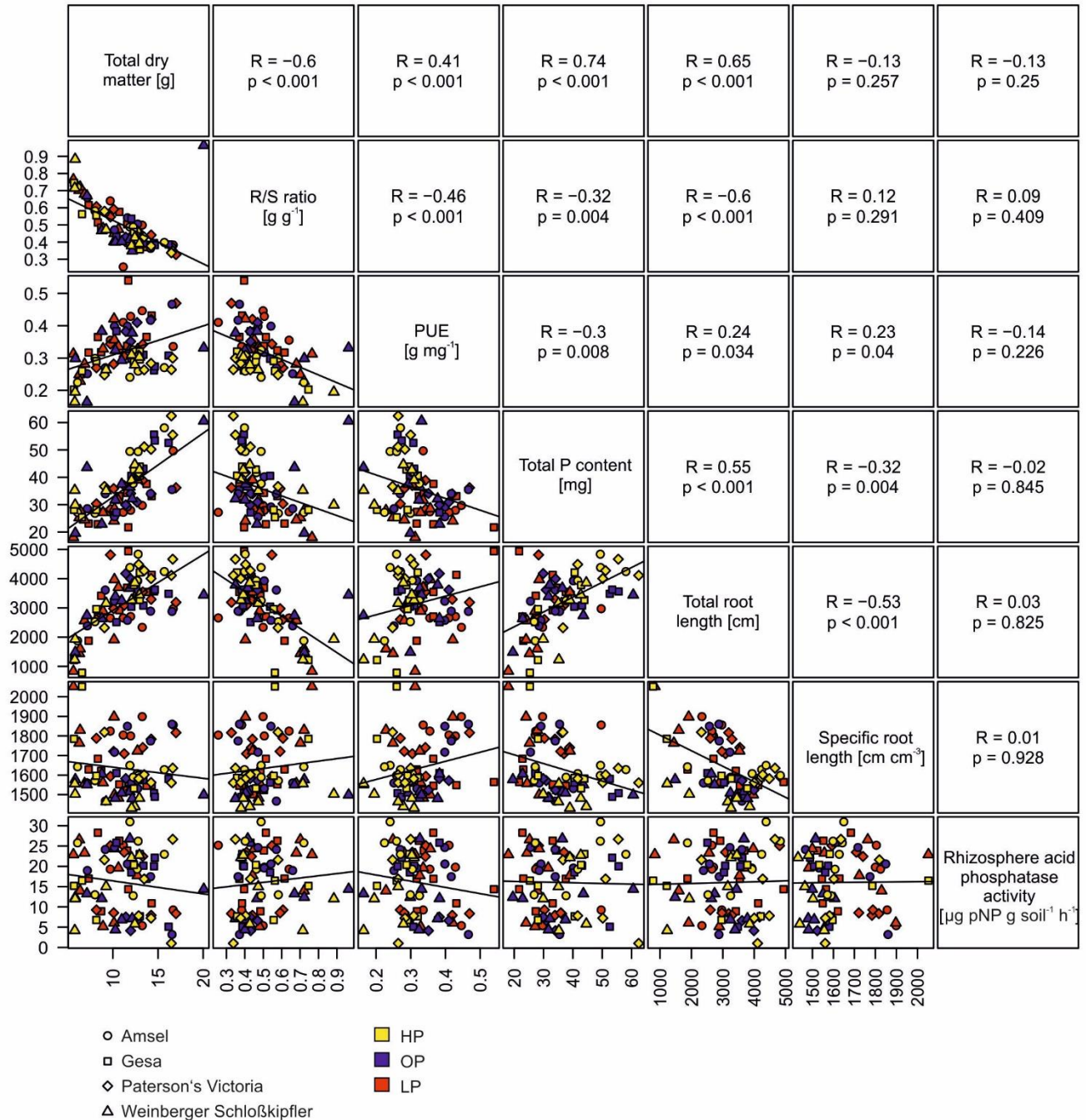


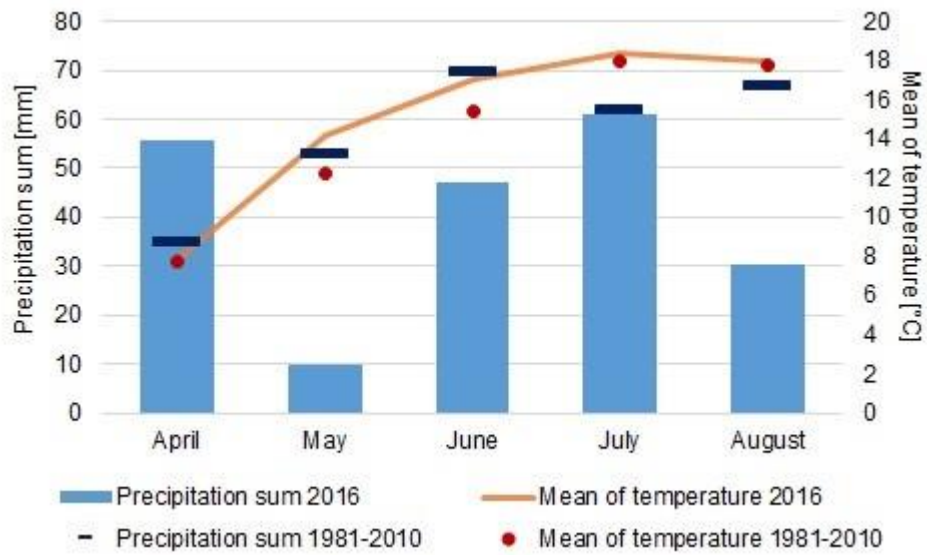
*Supplementary Material*



**Supplementary Figure S1.** Large wire cage used in Experiment A.



**Supplementary Figure S2.** Pearson's correlation coefficients between plant parameters of the potato cultivars Amsel (circle), Gesa (square), Paterson's Victoria (diamond) and Weinberger Schloßkipfler (triangle) grown in pots fertilized with  $\text{KH}_2\text{PO}_4$  (yellow),  $\text{C}_6\text{H}_{16}\text{CaO}_{24}\text{P}_6$  (blue) and without P supply (red).



**Supplementary Figure S3.** Monthly precipitation sum and temperature for growing period 2016 (calculated from values per day) and mean of 1981-2010 (data from Deutscher Wetterdienst, [www.dwd.de](http://www.dwd.de)) for the nearest weather station in Rostock-Warnemünde.