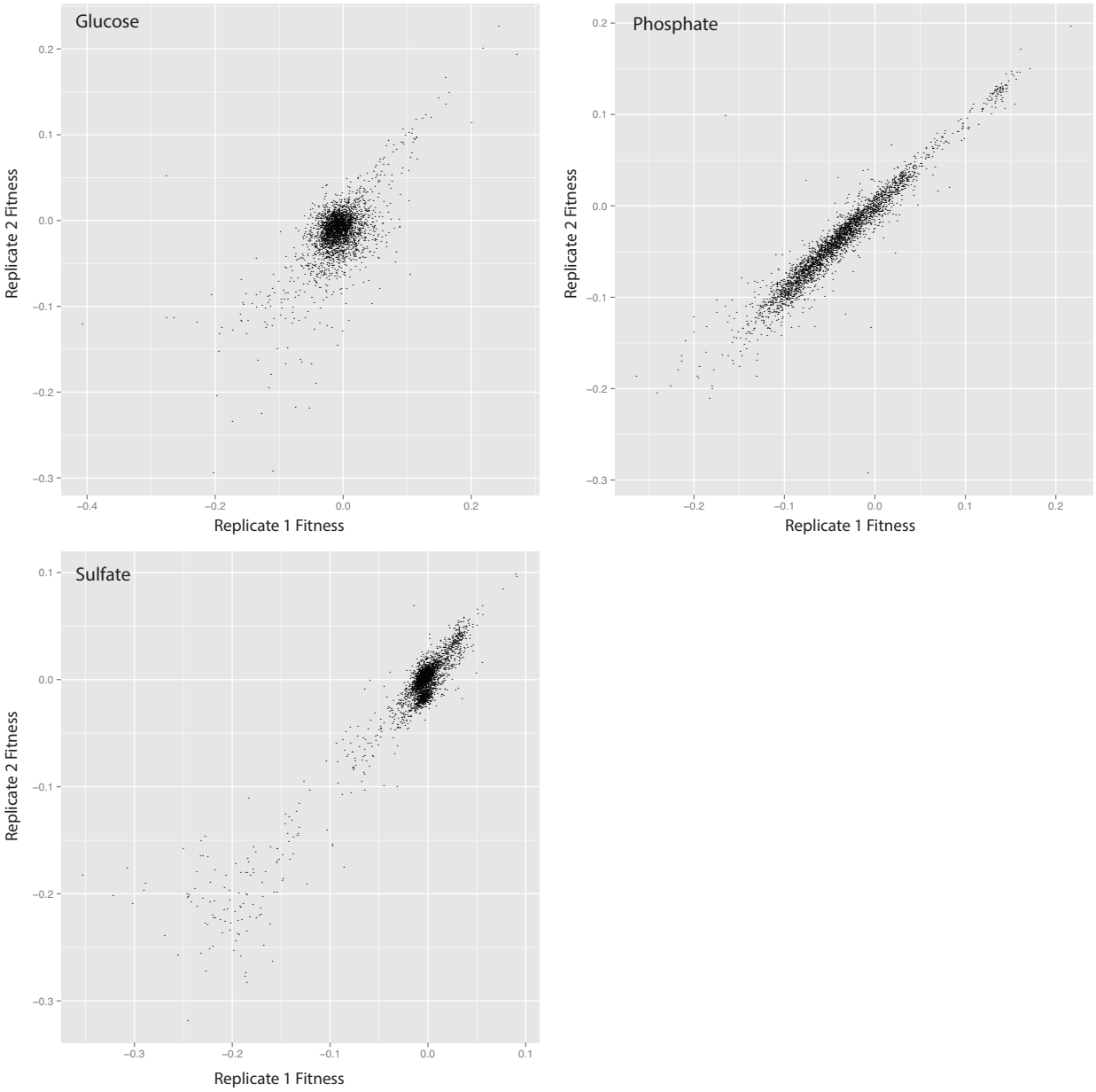
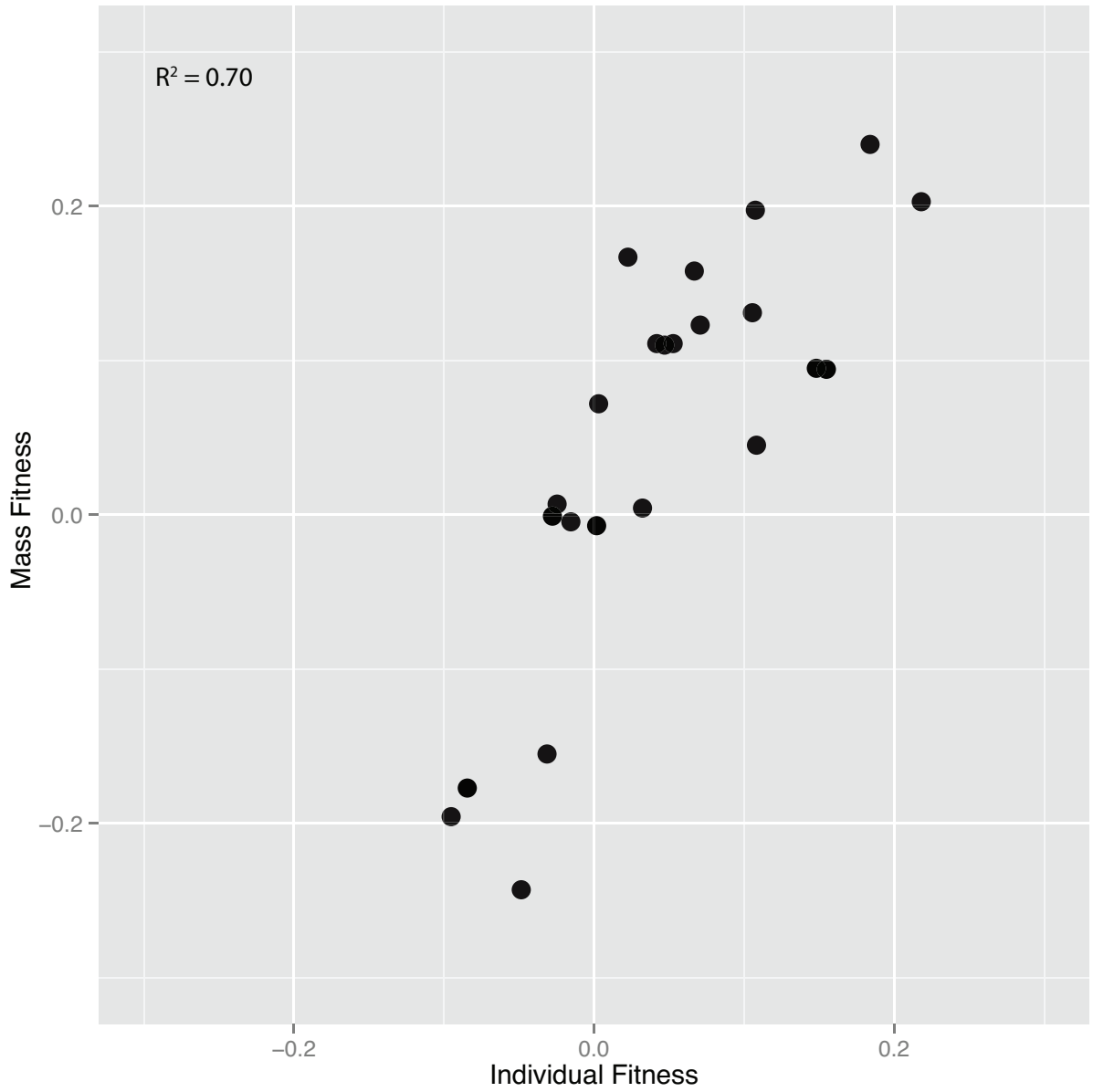
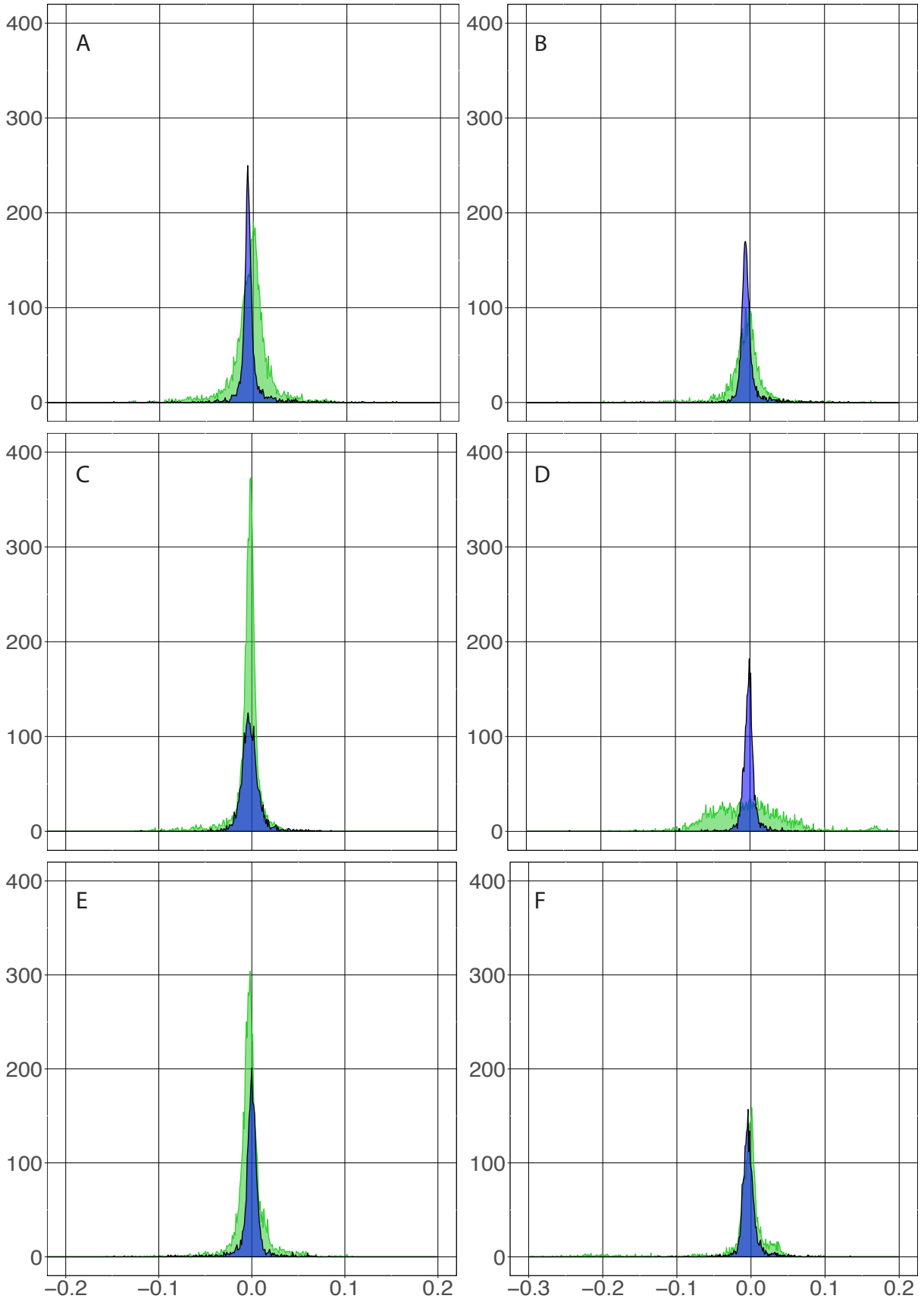
Supplemental Figures



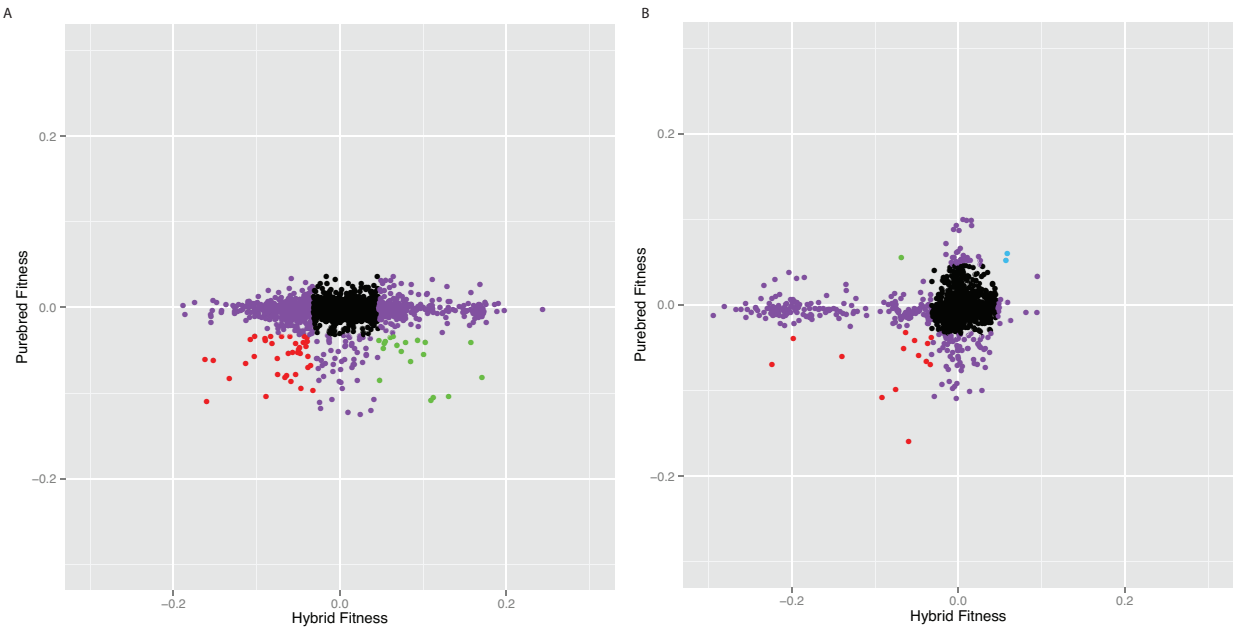
Supplemental Figure 1. Comparisons of fitness values derived from *en masse* hybrid hemizygote replicates in glucose, phosphate, and sulfate limitations.



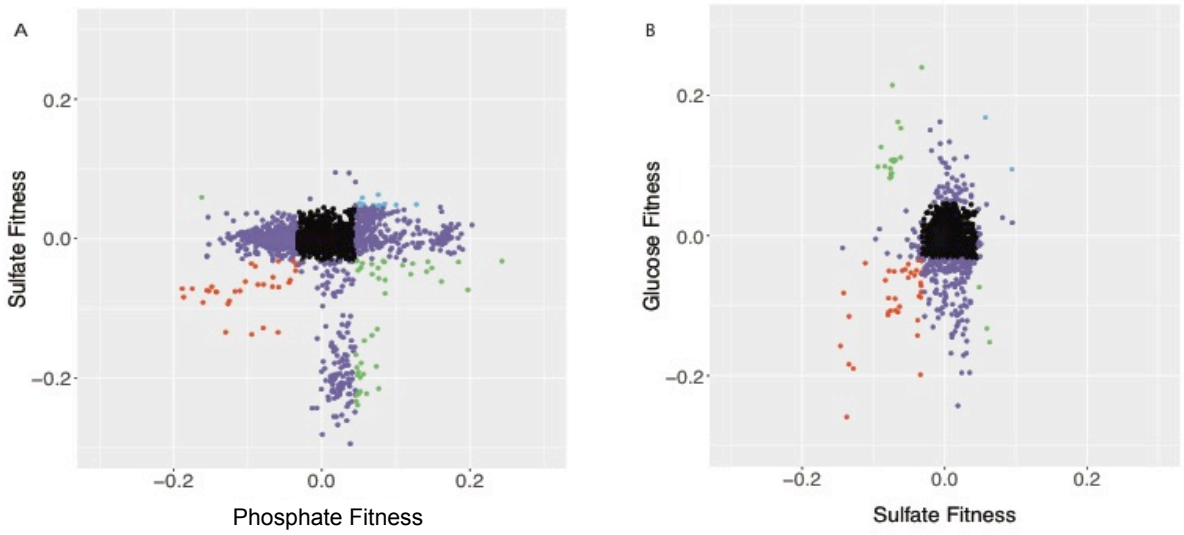
Supplemental Figure 2. Comparison of fitness of hemizygous mutants between *en masse* competition experiments and individual competition experiments.


A
B
C
D
E
F
400
300
200
100
0
−0.3
−0.2
−0.1
0.0
0.1
0.2

Supplemental Figure 3. Fitness distribution of WT hybrids and hemizygous hybrids (B, D, F), and WT purebreds and hemizygous purebreds (A,C,E). Green is the hemizygous deletion distribution and blue is the WT distribution of fitness in (A,B) glucose, (C,D) phosphate and (E,F) sulfate limited media.



Supplemental Figure 4. Comparison between hybrid and purebred fitness in A) phosphate and B) sulfate limitations. Black strains fall inside the 1% cutoff in both axes, purple strains fall outside the 1% cutoff in just one axis, and the other colors fall outside of the cutoffs in both axes. Both $R^2 = 0.00$.



Supplemental Figure 5. Comparison of hybrid hemizygous fitness values between A) sulfate and phosphate limitations and B) glucose and sulfate limitations. Black strains fall inside the 1% cutoff in both axes, purple strains fall outside the 1% cutoff in just one axis, and the other colors fall outside of the cutoffs in both axes. Both $R^2 = 0.00$.