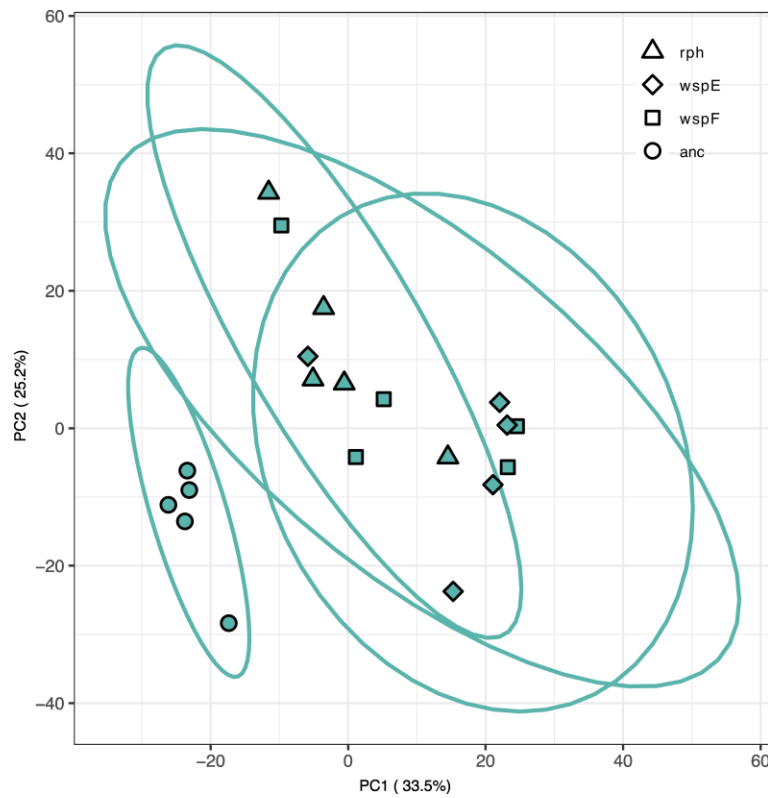


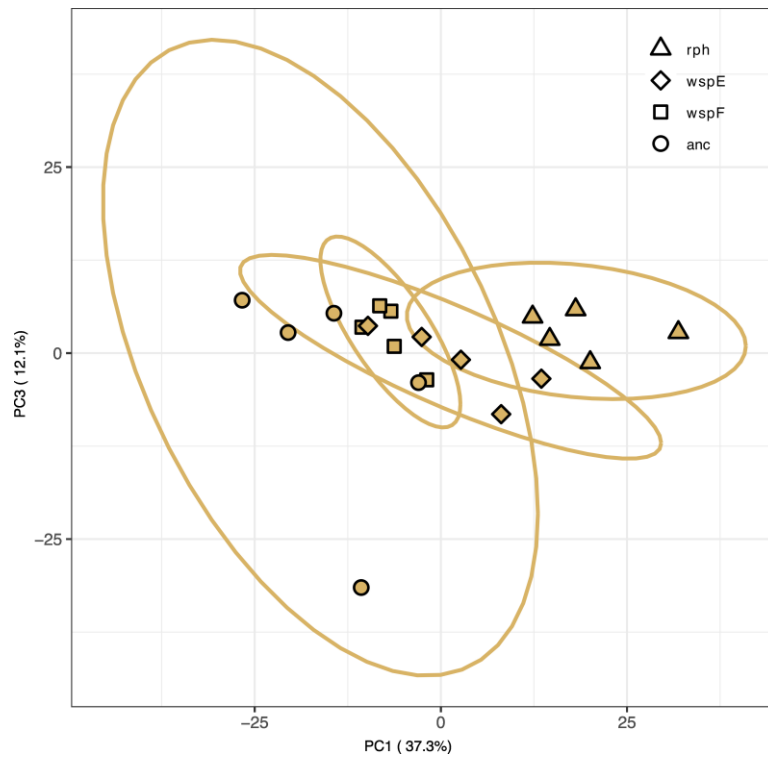
**Supplementary Figure 1: PCA of ancestral and host-specialized *P. lurida* MYb11 in different environments.**

PCA of log counts per million (CPM) reads of MYb11 and the evolved wrinkly *wspF*, *wspE* and *rph* mutants in liquid and solid environments with PC1 and PC2. Green: liquid environment, brown: solid environment. RNA-seq were performed with 5 replicates for each strain.



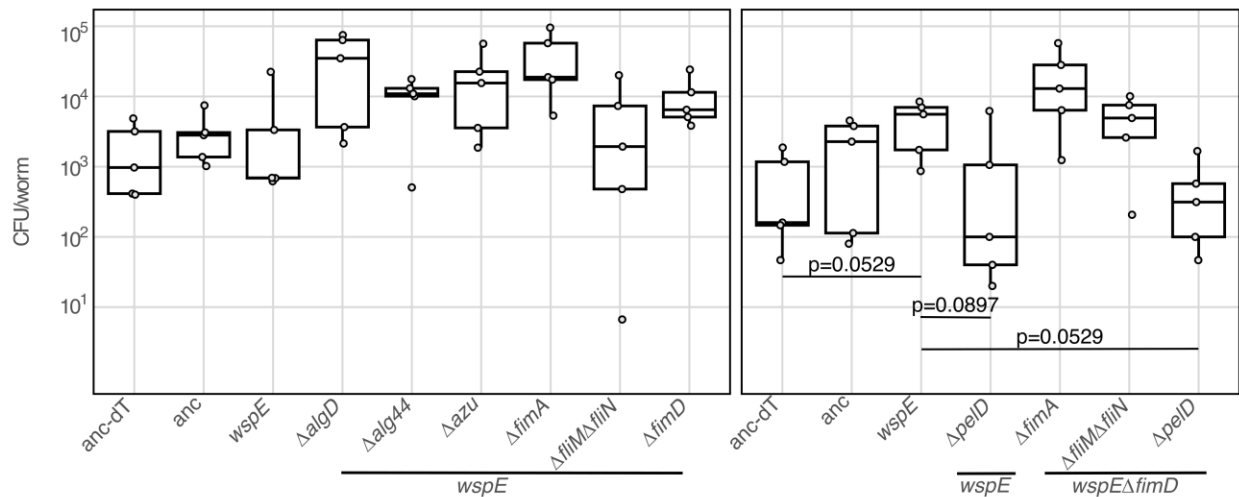
**Supplementary Figure 2: PCA of ancestral and host-specialized *P. lurida* MYb11 in a liquid environment.**

PCA of log counts per million (CPM) reads of MYb11 and the evolved wrinkly *wspF*, *wspE* and *rph* mutants with PC1 and PC2. RNA-seq were performed with 5 replicates for each strain.



**Supplementary Figure 3: PCA of ancestral and host-specialized *P. lurida* MYb11 in a solid environment.**

PCA of log counts per million (CPM) reads of MYb11 and the evolved wrinkly *wspF*, *wspE* and *rph* mutants with PC1 and PC3. RNA-seq were performed with 5 replicates for each strain



**Supplementary Figure 3: *pelD*-knockout shows a trend towards a reduction in CFU/worm.**

CFU/per worm during short-term persistence monocolonization in *C. elegans* MY316. 3 < n < 5 replicates per strain. Statistical significance was determined using an equal variances t-test, a Mann-Whitney U-test or a Welch's t-test with FDR corrections for multiple testing, depending on whether the parametric assumptions were met (Supplementary Tables 17-18, Additional file 2).