**Table S5. Number of differentially expressed (DE) genes across parental expression data for each of the four main effects (tissue, sex, genotype, environment) and their interactions using a full parameterized model in DESeq2 (see section 3: “Extended Parental Gene Expression Analyses “).**

|  |  |
| --- | --- |
| Effect/Interaction | No. DE Genes (FDR < 0.05) |
| Tissue | 13,713 |
| Sex | 1,705 |
| Genotype | 8,480 |
| Environment | 4,446 |
| Tissue:Sex | 1,483 |
| Tissue:Genotype | 5,621 |
| Tissue:Environment | 2,195 |
| Genotype:Sex | 47 |
| Sex:Environment | 1 |
| Genotype:Environment | 126 |
| Tissue:Genotype:Sex | 19 |
| Tissue:Sex:Environment | 2 |
| Tissue:Genotype:Environment | 20 |
| Sex:Genotype:Environment | 35 |
| Tissue:Sex:Genotype:Environment | 0 |