

1 Metazoan Genome Coverage

Table 1: Percent coverage of conserved eukaryotic genes (CEGs) in the genomes of the metazoan species used in the study. CEGs were isolated following the methodology of Parra *et al.*. Briefly, genes conserved in the well-studied model organisms; *Homo sapiens*, *Caenorhabditis elegans*, *Drosophila melanogaster*, *Saccharomyces cerevisiae*, *Arabidopsis thaliana* & *Schizosaccharomyces pombe* with copy number of one, were considered CEGs. Genomes that were used to isolate the CEGs are highlighted in blue. Genomes whose CEG coverage fall in the lower quartile are highlighted in yellow.

| Metazoan Species Genome | Gene Space Coverage (%) |
|------------------------------|-------------------------|
| Aedes aegypti | 96.1 |
| Anopheles gambiae str. PEST | 96.6 |
| Apis mellifera | 91.2 |
| Acyrtosiphon pisum | 92.4 |
| Brugia malayi | 96.1 |
| Bombyx mori | 91.7 |
| Caenorhabditis briggsae AF16 | 98.5 |
| Caenorhabditis elegans | 100.0 |
| Ciona intestinalis | 79.0 |
| Canis lupus familiaris | 98.8 |
| Culex pipiens | 94.9 |
| Drosophila melanogaster | 100.0 |
| Danio rerio | 96.6 |
| Gallus gallus | 88.3 |
| Homo sapiens | 100.0 |
| Monodelphis domestica | 97.6 |
| Mus musculus | 100.0 |
| Nematostella vectensis | 97.3 |
| Ornithorhynchus anatinus | 84.1 |
| Pediculus humanus | 97.8 |
| Pan troglodytes | 98.3 |
| Rattus norvegicus | 96.8 |
| Schistosoma mansoni | 91.0 |
| Trichoplax adhaerens | 95.9 |
| Tetraodon nigroviridis | 95.9 |
| Takifugu rubripes | 96.1 |