

**Table S13: Summary of gene families in the genomes of nine sequenced vertebrate species by Treefam**

| <b>Species</b>                | <b>#Total<br/>genes</b> | <b>#Unclustered<br/>genes</b> | <b>#Families</b> | <b>#Unique<br/>families</b> | <b>Ave. genes<br/>per family</b> |
|-------------------------------|-------------------------|-------------------------------|------------------|-----------------------------|----------------------------------|
| <i>Larimichthys crocea</i>    | 25,387                  | 1,687                         | 14,698           | 215                         | 1.61                             |
| <i>Danio rerio</i>            | 25,618                  | 1,218                         | 14,378           | 112                         | 1.7                              |
| <i>Gadus morhua</i>           | 20,490                  | 567                           | 14,024           | 12                          | 1.42                             |
| <i>Gallus gallus</i>          | 16,344                  | 2,987                         | 11,840           | 99                          | 1.13                             |
| <i>Gasterosteus aculeatus</i> | 20,738                  | 786                           | 14,036           | 16                          | 1.42                             |
| <i>Homo sapiens</i>           | 19,959                  | 3,253                         | 13,215           | 421                         | 1.26                             |
| <i>Oryzias latipes</i>        | 19,529                  | 1,040                         | 13,105           | 80                          | 1.41                             |
| <i>Takifugu rubripes</i>      | 18,453                  | 232                           | 12,888           | 7                           | 1.41                             |
| <i>Tetraodon nigroviridis</i> | 19,520                  | 828                           | 13,206           | 49                          | 1.42                             |