



**Figure S1 Distinct fertilization types in Lake Tanganyikan cichlids and ancestral reconstruction**

**of fertilization types** Fertilization types were categorized into three types: 1) fertilization in the buccal cavity (oral fertilization) in mouth brooders, 2) stocked-sperm fertilization in bower-building mouth brooders, and 3) substrate fertilization in mouth brooders or substrate brooders. Maximum likelihood of the phylogenetic tree based on 45 nuclear markers [43]. Pie charts show the probability of three fertilization types in nodes, and asterisks indicate statistically significant types.