

Description of Additional Supplementary Files

File name: Supplementary Data 1

Description: Statistics of sequencing reads.

File name: Supplementary Data 2

Description: Statistics of non-coding RNA.

File name: Supplementary Data 3

Description: KEGG enrichment of expanded gene families in *E. rhadinum*.

File name: Supplementary Data 4

Description: GO enrichment of expanded gene families in *E. rhadinum*.

File name: Supplementary Data 5

Description: GO enrichment of contracted gene families in *E. rhadinum*.

File name: Supplementary Data 6

Description: The number of OR genes in different fish species.

File name: Supplementary Data 7

Description: Results of ABBA /BABA analysis for quantifying introgression at whole-genome level.

File name: Supplementary Data 8

Description: Results of introgressed SNPs annotations.

File name: Supplementary Data 9

Description: All identified OR protein sequences in this study.