

Supplementary materials

Table S1

Water quality of three habitats.

Index	The WP group	The OP group	The IP group
Temperature (°C)	29-30	28-31	29-31
Salinity (‰)	31-32	29-31	31-32
DO (mg/L)	6.4-7.6	4.8-6.0	6.0-6.5
pH	8.1-8.3	7.9-8.2	7.6-8.0

WP, wild population; OP, outdoor pond; IP, indoor pond.

Table S2

The sequencing data of intestinal microbial after filtering.

Group	Raw reads	Clean reads	OTUs
WP1	99126	67089	272
WP2	107863	72162	275
WP3	84173	52675	256
OP1	91691	59227	273
OP2	91265	57345	299
OP3	167638	131992	313
IP1	125975	85422	435
IP2	138905	93503	405
IP3	118057	80748	350

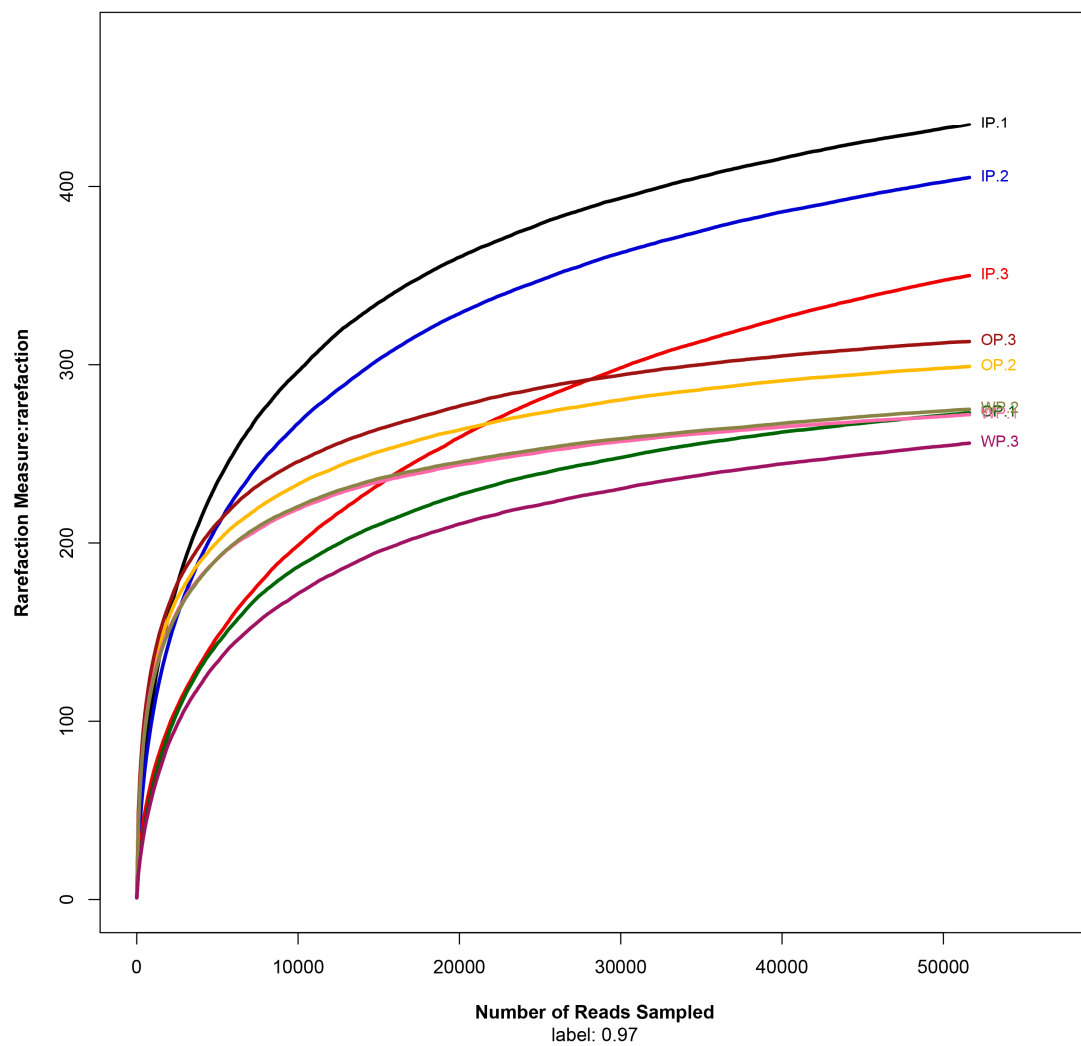


Fig. S1. The sequencing rarefaction curve of intestinal microbial.

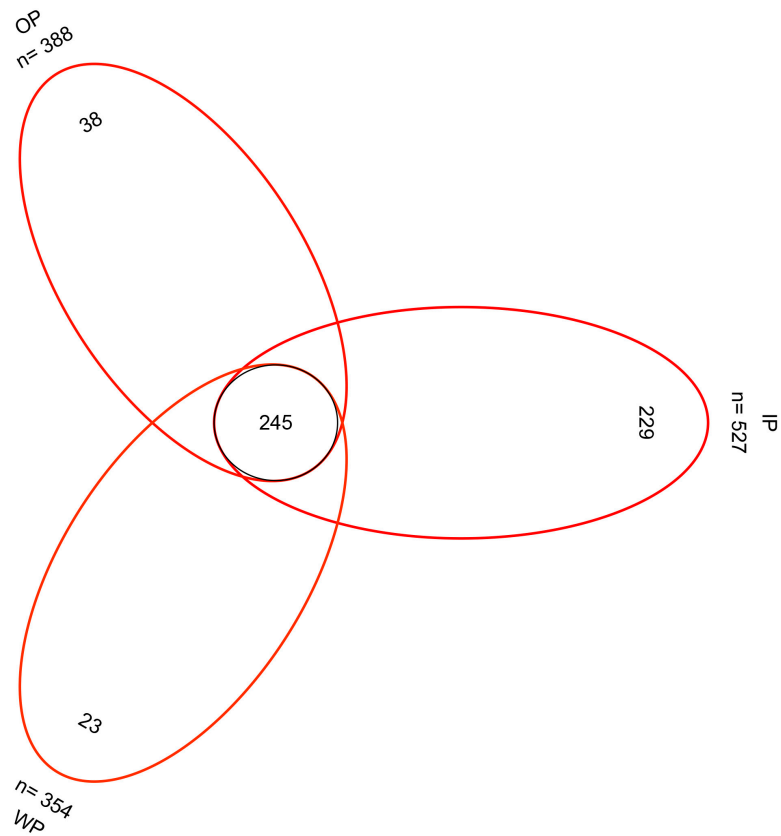


Fig. S2. The Venn analysis of the OTUs of intestinal microbial communities in *S. oramin* across three different habitats.

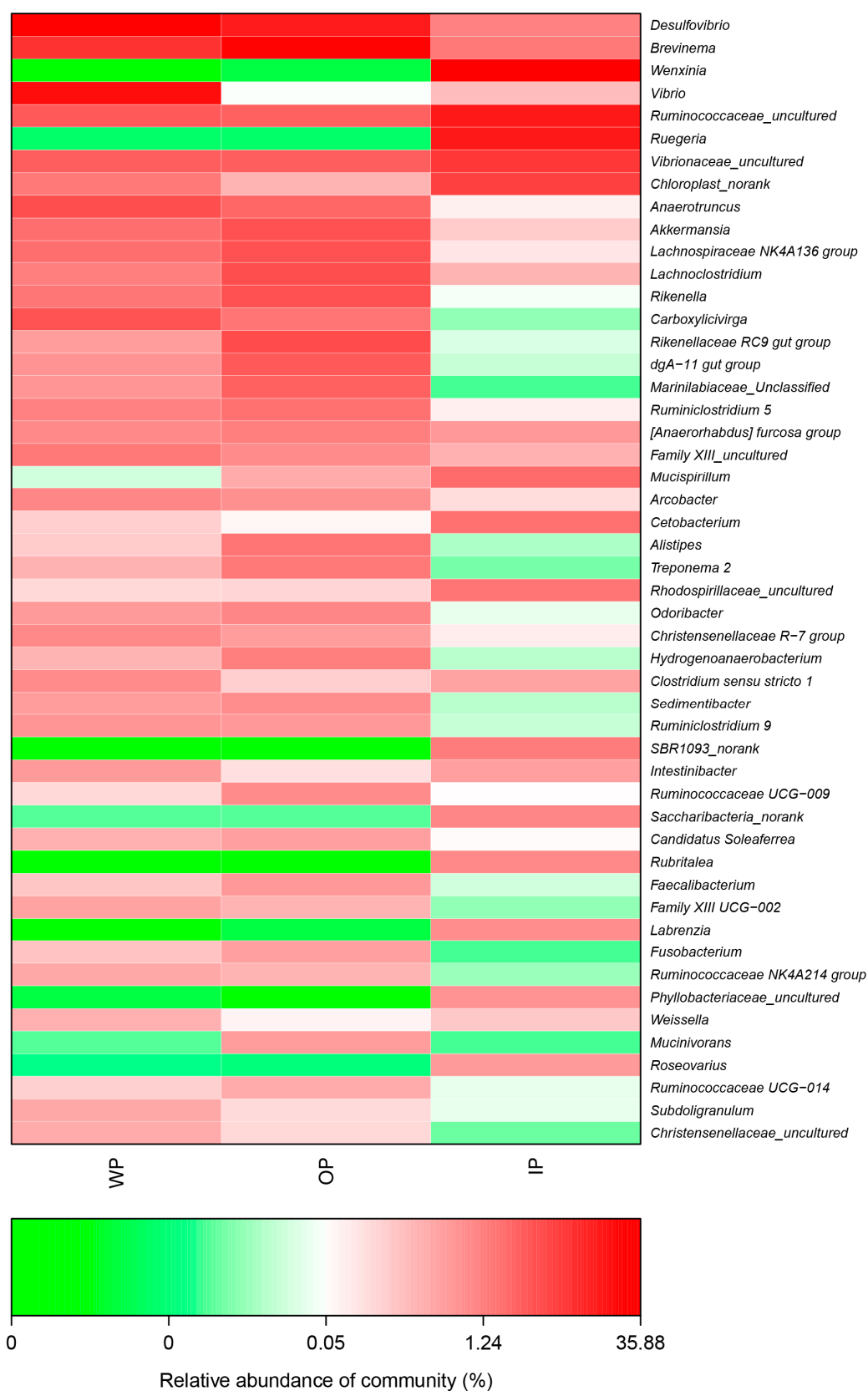


Fig. S3. Heatmap of the relative abundance of the top 50 intestinal bacterial genus in *S. oramin* across three different habitats.