

Supplementary Materials

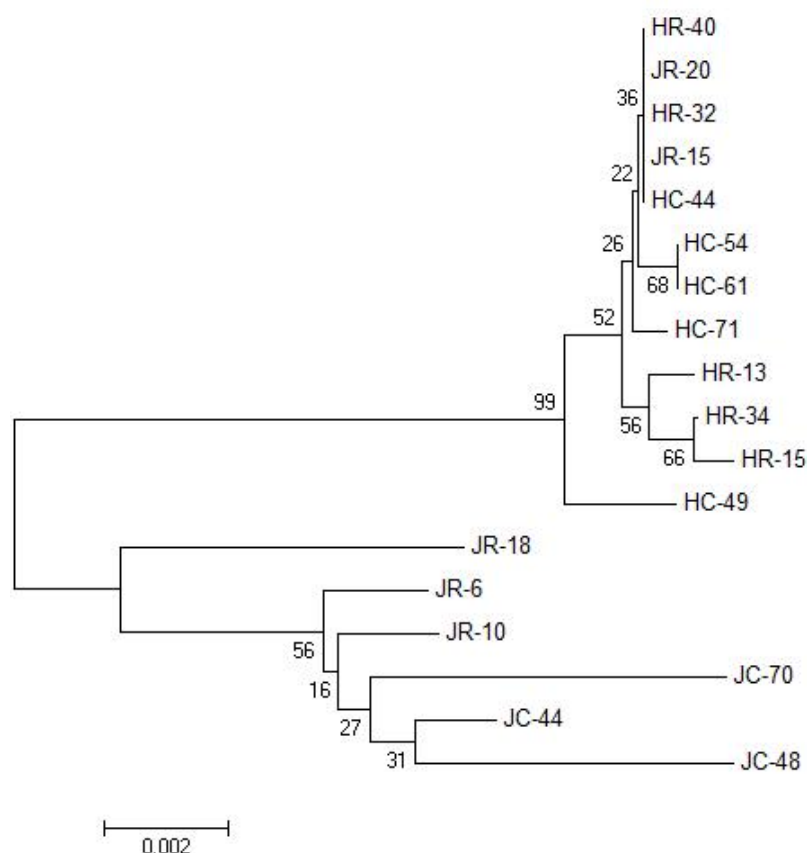


Figure S1. Phylogenetic tree analysis plot of 18 bacterial strains isolated from tilapia body and its living environment was carried out.

Table S1. Determination of volatile flavor compounds in fish flesh after storage for 0 and 6 days by GC-MS.

No.	Compounds	Concentration (mg/L)							
		Control_0	HR_15_0	JR_18_0	HC_71_0	Control_6	HR_15_6	JR_18_6	HC_71_6
1	Benzyl alcohol	0	0	0	0	0.0060002 7	0	0	0
2	Phenylethyl alcohol	0	0	0.0087800 2	0	0.0570408	0.0189116	0.0337343	0.0409916
3	1-Propanol,3-(methylthio)-	0	0	0	0	0.0079823 4	0	0.0040864 6	0.0059424
4	1-Butanol	0	0	0.026526	0	0	0	0	0
5	Isoamyl alcohol	0	0	0	0	0.153931	0	0	0
6	n-Hexyl alcohol	0	0	0	0	0.0199328	0	0.0193308	0
7	2-Ethyl-1-hexanol	0.0157037	0.0242277	0.020183	0.0139456	0.0240488	0.0158369	0.034609	0.0103195
8	1-Heptanol, 6-Methyl-	0	0	0	0	0	0	0	0.0061831 3
9	1-Octanol	0.0088972 2	0	0.0122797	0	0	0	0.0086338 2	0

10	Cyclooctanol	0.0439114	0	0.0248942	0	0	0	0	0
11	1-Octen-3-ol	0.179814	0.0707772	0.200518	0.271222	0.314882	0.134928	0.131511	0.0798976
12	2-Octen-1-ol	0	0	0	0	0.0792827	0.0263469	0	0
13	cis-2-Nonen-1-ol	0	0	0	0	0.0716065	0	0	0
14	Ethyl-PEG4-alcohol	0	0.003824	0	0.0072021 8	0	0.0125542	0.0144037	0.0072319 5
15	Dichloromethane	0	0	0	0	0	0	0	0.0019279 1
16	Cyclodecane	0	0	0	0	0	0	0	0.0133213
17	naphthalene	0.0074691 6	0.0056892 9	0	0.0093948	0.0177583	0.0119786	0.0102225	0.0117814
18	1,3-Cyclooctadiene	0.0665207	0.0222672	0.0482567	0.0864693	0.166543	0.0521605	0.035915	0.0161463
19	1-Decene	0	0	0	0.0120163	0	0	0	0
20	2,5,5-Trimethyl-2-hexene	0	0	0.10486	0.145482	0	0.119025	0.0835227	0.0911434
21	Benzaldehyde	0.0059466	0.0054343 9	0.0085063 8	0.0136683	0.0574382	0.0331552	0.0412288	0.0265823
22	Phenylacetaldehyde	0	0	0	0	0	0	0.0127273	0
23	Hexanal	0.0019701	0	0	0	0	0	0	0
24	n-capryl(ic) aldehyde	0	0	0.0207473	0	0	0	0	0
25	Nonanal	0.0565697	0.0585565	0.0769311	0.0493641	0.0547983	0.0460169	0.0620162	0.0462601
26	Decanal	0.0306064	0.0326806	0.0192433	0.0145414	0	0	0	0
27	7-Methoxy-1,3-benzodioxole-5-carboxaldehyde	0	0	0	0	0.0163072	0	0	0.0229477
28	octadecanal	0	0	0	0	0	0.0151497	0	0
29	dimethylsilanediol	0	0	0	0.0197672	0	0.011725	0	0.0126715
30	Carbamic acid	0.106571	0	0.0916732	0	0	0.0368159	0	0.0260926
31	Ethyl 2-hydroxy-2-(4-hydroxyphenyl)acetate	0	0	0	0	0	0.01409	0	0
32	n-Butyl butanoate	0	0	0	0	0	0	0.0121213	0.0063457 3
33	Hexyl chlorocarbonate	0	0	0	0	0	0	0.019009	0
34	Formic acid, octylester	0	0	0.0130695	0	0	0	0	0
35	phenyl acetate	0.0038193 6	0	0	0	0	0	0	0
36	3-Octanone	0	0	0.011306	0	0	0	0	0.0068053 9
37	2-Methyl-3-Octanol	0	0	0	0.0145139	0	0	0	0
38	2,3-Octanedione	0	0	0	0	0.0136639	0	0	0

39	2,5-Octanedione	0	0	0	0	0	0	0.0138113	0
40	Phenol	0	0	0	0	0.0280136	0.0064365 2	0.0117643	0.0054067 3
41	2,4-Di-t-butylphenol	0.0846115	0.0637134	0.11579	0.0119234	0.159647	0.0823175	0.109517	0.0975851
42	Butylated hydroxytoluene	0.0123474	0.0095405 8	0.0227913	0.115976	0.0158433	0.0191552	0.0099613 8	0.0085268
43	biphenyl	0.0027217 3	0	0.0071482 1	0.0052373 1	0	0	0.0046587 7	0
44	Benzene,1,3-bis(1,1-dimethylethyl)-	0.430832	0.171806	0.628301	0.503079	0.27652	0.305435	0.210267	0.176572