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Supplementary Materials

Effects of substrates and suppliers of ingredients on microbial community and metabolites of traditional non-salt Suancai

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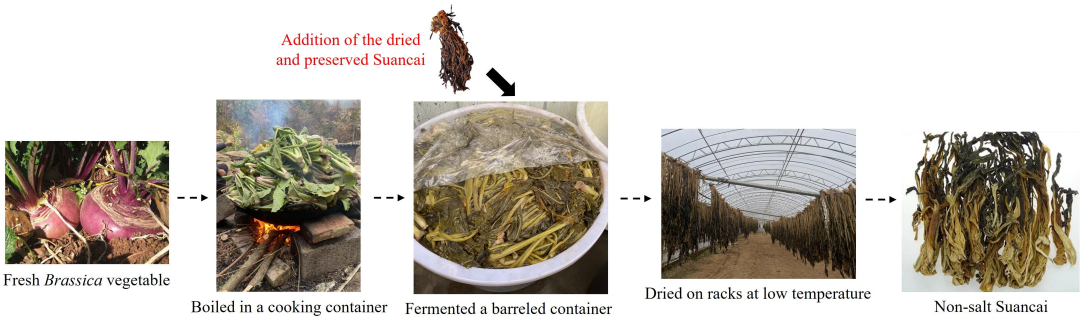
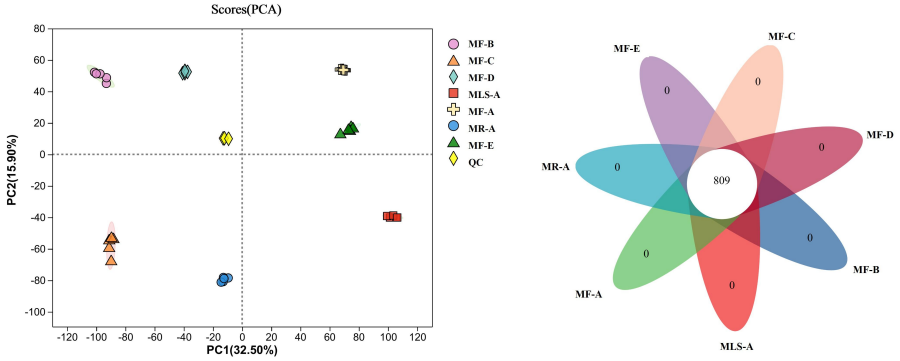
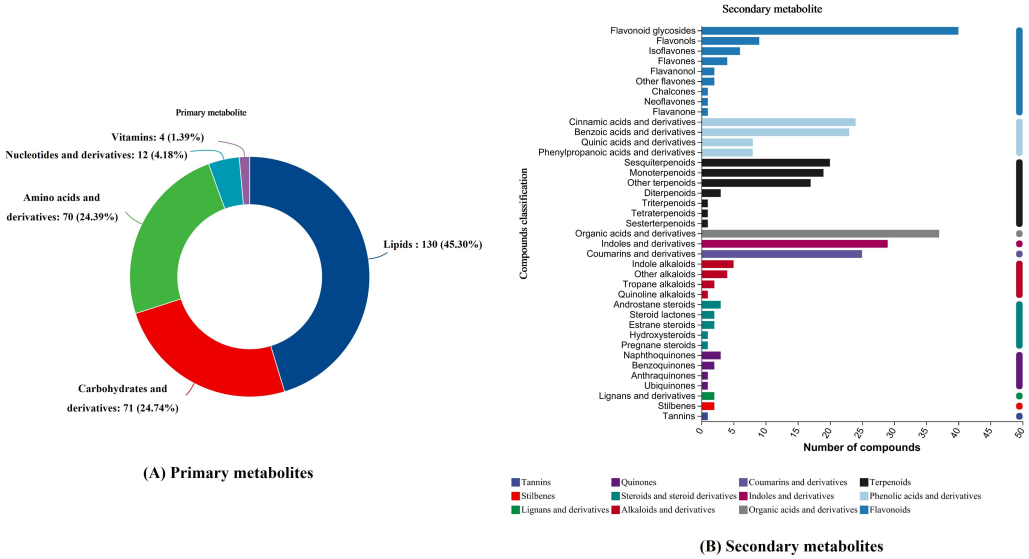


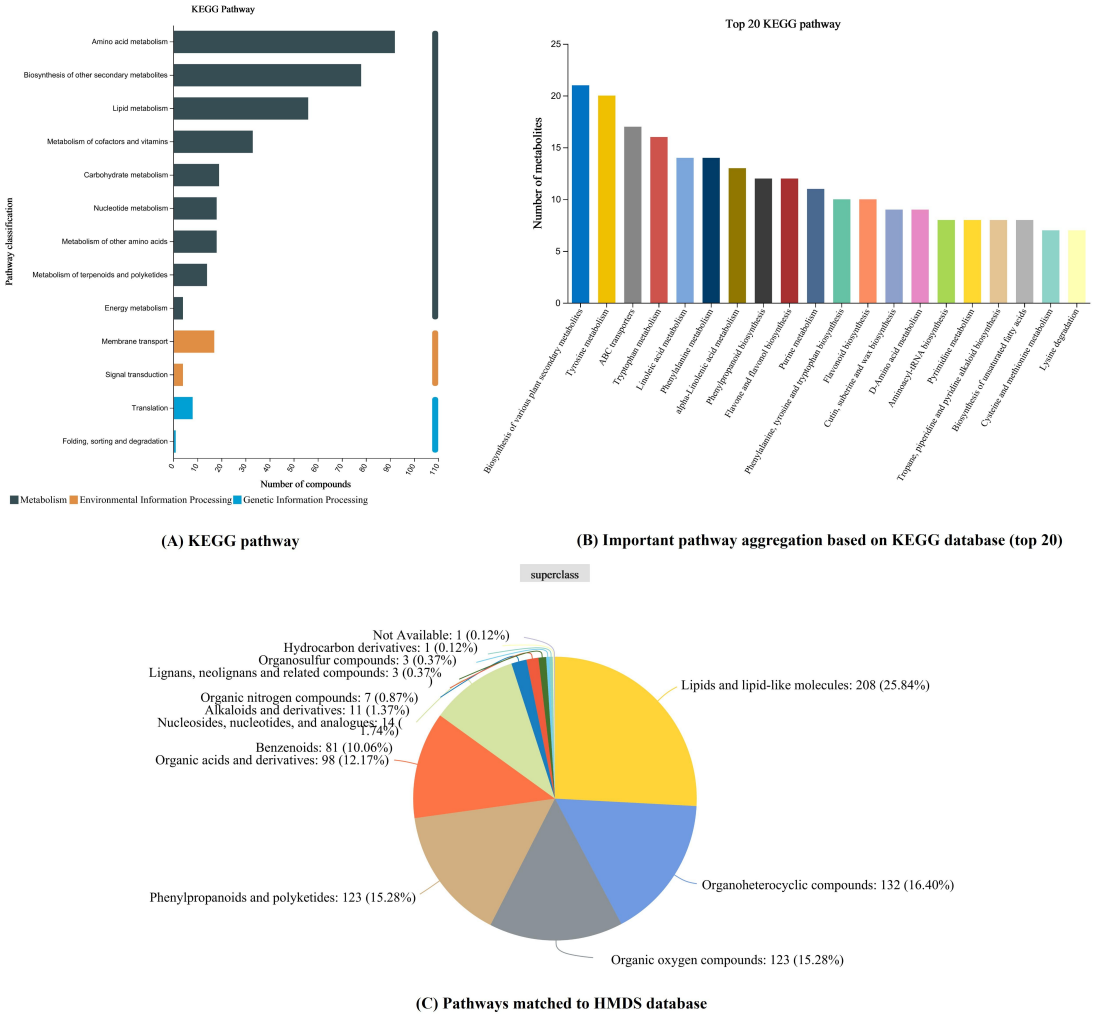
Supplementary Figure 1. A diagram of traditional technology of non-salt Suancai.



Supplementary Figure 2. (A) PCA plot of samples; (B) Venn diagram of identified metabolites



Supplementary Figure 3. Metabolites were classified into (A) primary and (B) secondary.

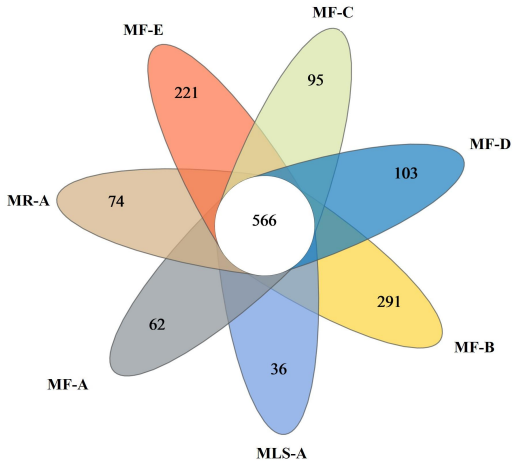


(A) KEGG pathway

(B) Important pathway aggregation based on KEGG database (top 20)

(C) Pathways matched to HMDS database

Supplementary Figure 4. Metabolites were enriched through the metabolic pathway of (A) KEGG database and its (B) important pathway, (C) HMDS database.



Venn diagram of microbes at species level

Supplementary Figure 5. Veen diagram of microbes among samples at species level.

Supplementary Table 1. Mobile phase elution gradient of C18 column

Time (min)	0	0.5	7.5	13	14.4	14.5	16
A%	98	98	65	5	5	98	98
B%	2	2	35	95	95	2	2

Supplementary Table 2. Raw and annotated data for metabolomics

Ion mode	**All peaks**	**Identified metabolites**	**Metabolites in library**	**Metabolites in KEGG**
Pos	8779	510	506	312
neg	7907	317	313	197
mix	16686	827	819	509

All peaks mean the number of MS peak selected by software. Identified metabolites mean the final number of metabolites identified by self-built, Metlin, HMDB database, *etc*. Metabolites in Library means the number of metabolites blast by using the common database, such as HMDB, Lipidmaps, *etc*. Metabolites in KEGG means the number of metabolites blast by using the KEGG database.

Supplementary Table 3. Raw and annotated data for metagenomics

Samples	Raw reads	Raw base (bp)	Clean reads	Clean base (bp)	Contigs	ORFs
MF-B-1	46,565,648	7,031,412,848	46,189,400	6,963,961,674	61,092	104,769
MF-B-2	46,007,430	6,947,121,930	45,696,036	6,888,026,046	65,427	110,566
MF-B-3	50,701,468	7,655,921,668	50,345,484	7,588,961,304	63,647	108,753
MF-C-1	40,780,878	6,157,912,578	40,455,630	6,101,538,479	13,989	25,981
MF-C-2	43,598,670	6,583,399,170	43,289,718	6,528,807,247	17,022	28,888
MF-C-3	439,243,56	6,632,577,756	43,614,908	6,578,313,515	15,063	27,102
MF-D-1	44,531,978	6,724,328,678	44,204,116	6,666,575,009	51,456	69,416
MF-D-2	51,208,942	7,732,550,242	50,914,276	7,676,236,289	72,635	82,160
MF-D-3	46,279,170	6,988,154,670	45,919,582	6,923,416,810	64,432	80,234
MR-A-1	44,499,482	6,719,421,782	44,162,520	6,656,337,359	82,205	65,725
MR-A-2	45,552,980	6,878,499,980	45,196,236	6,814,750,726	66,550	56,929
MR-A-3	44,245,956	6,681,139,356	43,909,272	6,618,484,396	65,129	53,886
MF-A-1	42,258,222	6,380,991,522	41,940,690	6,323,216,959	33,205	41,747
MF-A-2	41,446,412	6,258,408,212	41,119,276	6,198,068,708	35,522	42,715
MF-A-3	42,396,386	6,401,854,286	42,082,210	6,343,650,402	24,233	34,652
MLS-A-1	43,028,758	6,497,342,458	42,744,956	6,447,383,956	13,986	28,968
MLS-A-2	47,400,278	7,157,441,978	47,083,872	7,100,564,733	16,962	33,031
MLS-A-3	41,977,944	6,338,669,544	41,695,654	6,287,949,718	13,850	28,805
MF-E-1	43,584,022	6,581,187,322	43,273,986	6,526,131,944	26,546	40,508
MF-E-2	46,761,246	7,060,948,146	46,407,778	6,997,117,946	27,413	41,747
MF-E-3	41,402,248	6,251,739,448	41,177,482	6,207,496,294	27,440	41,023

Supplementary Table 4. Chao 1 and Simpson index of the determined samples

Sample	Chao 1	Simpson
MF-A-1	1618	0.152
MF-A-2	1606	0.142
MF-A-3	1548	0.170
MLS-A-1	898	0.258
MLS-A-2	873	0.268
MLS-A-3	890	0.266
MR-A-1	1237	0.351
MR-A-2	1315	0.349
MR-A-3	1210	0.352
MF-B-1	2256	0.112
MF-B-2	2310	0.109
MF-B-3	2312	0.112
MF-C-1	1383	0.376
MF-C-2	1494	0.365
MF-C-3	1438	0.376
MF-D-1	1654	0.216
MF-D-2	1751	0.199
MF-D-3	1774	0.200
MF-E-1	1559	0.198
MF-E-2	1632	0.197
MF-E-3	1610	0.198