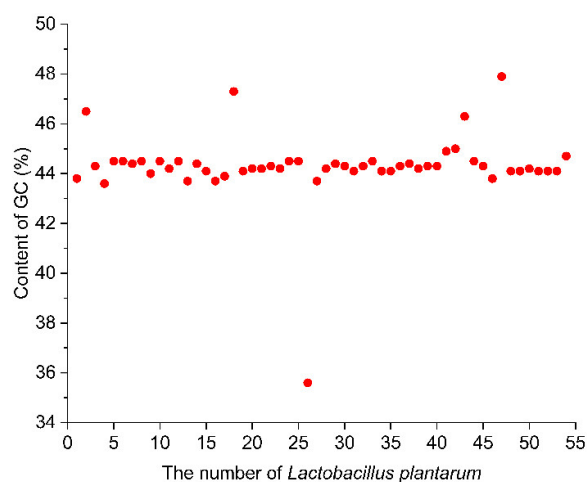
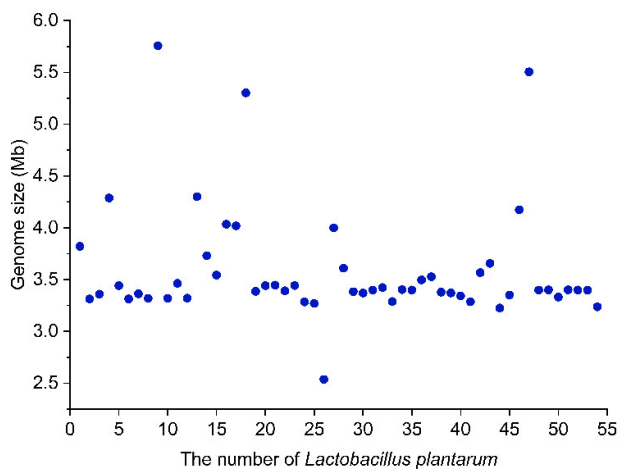


Figure S1. A pie chart of the number of samples of culturable lactic acid bacteria and the number of samples of non-culturable LAB.



(A)



(B)

Figure S2. GC content and genomic size of *Lactobacillus plantarum*. (A) GC content distribution of *L. plantarum*. (B) Genomic size distribution of *L. plantarum*.

Table S1. Detailed information of 54 strains of *Lactobacillus plantarum*.

Strains	Habitat	Sampling place
A182	Fermented bean products	Fuyuan County, Qujing City
A234	Fermented vegetables	Wuhua District, Kunming City
A241	Fermented vegetables	Wuhua District, Kunming City
A464	Fermented vegetables	Chuxiong City, Chuxiong Yi Autonomous Prefecture
A465	Fermented vegetables	Chuxiong City, Chuxiong Yi Autonomous Prefecture
A466	Fermented vegetables	Chuxiong City, Chuxiong Yi Autonomous Prefecture
A553	Fermented bean products	Kunming City
A555	Fermented bean products	Kunming City
A7310	Fermented vegetables	Xuanwei City, Qujing City
A736	Fermented vegetables	Xuanwei City, Qujing City
A739	Fermented vegetables	Xuanwei City, Qujing City
A7412	Fermented vegetables	Xuanwei City, Qujing City
A754	Fermented vegetables	Xuanwei City, Qujing City
A765	Fermented vegetables	Xuanwei City, Qujing City
B231	Fermented vegetables	Chenggong District, Kunming City
B332	Fermented vegetables	Anning City, Kunming City
B431	Fermented vegetables	Hongta District, Yuxi City
B739	Fermented bean products	Wuhua District, Kunming City
B958	Fermented vegetables	Wuhua District, Kunming City
C232	Fermented vegetables	Guangnan County, Wenshan Zhuang and Miao Autonomous Prefecture
C233	Fermented vegetables	Guangnan County, Wenshan Zhuang and Miao Autonomous Prefecture
C246	Fermented vegetables	Guangnan County, Wenshan Zhuang and Miao Autonomous Prefecture
C333	Fermented vegetables	Malong District, Qujing City
C347	Fermented vegetables	Malong District, Qujing City
C4507	Fermented vegetables	Fuyuan County, Qujing City
C735	Fermented vegetables	Wuhua District, Kunming City,
C831	Fermented vegetables	Jinggu County, Pu 'er City
D0609	Fermented bean products	Dali City, Dali Bai Autonomous Prefecture
D0904	Fermented bean products	Dali City, Dali Bai Autonomous Prefecture
D2101	Fermented vegetables	Xishan District, Kunming City
D266	Fermented meat products	Hongta District, Yuxi City
D2706	Fermented vegetables	Ludian County, Zhaotong City
D3208	Fermented bean products	Yongsheng County, Lijiang City
D331	Fermented vegetables	Hongta District, Yuxi City
D332	Fermented vegetables	Hongta District, Yuxi City
D333	Fermented vegetables	Hongta District, Yuxi City
D334	Fermented vegetables	Hongta District, Yuxi City
D345	Fermented vegetables	Hongta District, Yuxi City

D444	Fermented vegetables	Guangnan County, Wenshan Zhuang and Miao Autonomous Prefecture
D5205	Fermented bean products	Xundian County, Kunming City
D5809	Fermented vegetables	Xuanwei City, Qujing City
E1031	Fermented vegetables	Wenshan Zhuang and Miao Autonomous Prefecture
E262	Fermented vegetables	Guangnan County, Wenshan Zhuang and Miao Autonomous Prefecture
E374	Fermented meat products	Kunming City
E4201	Fermented vegetables	Wuding County, Chuxiong Yi Autonomous Prefecture
E553	Fermented vegetables	Dali City, Dali Bai Autonomous Prefecture
E554	Fermented vegetables	Dali City, Dali Bai Autonomous Prefecture
E853	Fermented meat products	Kunming City
E855	Fermented meat products	Kunming City
E856	Fermented meat products	Kunming City
E858	Fermented meat products	Kunming City
E859	Fermented meat products	Kunming City
E8611	Fermented meat products	Kunming City
NZ_CP009236.1	Fermented bean products	Yuxi City
