Supplementary Table S1. Basic information of saline-alkali soil samples

Region	pH	Saline-alkali degree	North latitude	East longitude
Zhaoyuan	10.11	Severe	45°38′	124°39′
Dumeng	9.23	moderate	46°51′	123°30′
Fularki	8.4	slight	47°17′	123°30′

Supplementary Table S2. Information of 30 samples for 16S rRNA sequencing

Abbreviation	Rice variety	Soil (%)	Corn straw compost (%)	Gypsum (%)	Region
FD0	Wuyoudao No. 4	100	0	0	Dumeng
FD10		90	10	0	
FD30		70	30	0	
FD50		50	50	0	
FDS		92.3	0	7.7	
FF0		100	0	0	Fularki
FF10		90	10	0	
FF30		70	30	0	
FF50		50	50	0	
FFS		92.3	0	7.7	
FZ0		100	0	0	Zhaoyuan
FZ10		90	10	0	
FZ30		70	30	0	
FZ50		50	50	0	
FZS		92.3	0	7.7	
KD0	Tongxi 926	100	0	0	Dumeng
KD10		90	10	0	
KD30		70	30	0	
KD50		50	50	0	
KDS		92.3	0	7.7	
KF0		100	0	0	Fularki
KF10		90	10	0	
KF30		70	30	0	
KF50		50	50	0	
KFS		92.3	0	7.7	
KZ0		100	0	0	Zhaoyuan
KZ10		90	10	0	
KZ30		70	30	0	
KZ50		50	50	0	
KZS		92.3	0	7.7	