

Table S1. Geographical information of the archaeological maize samples used in this study.

ID	Country	Age (BP)	Location	Latitude	Longitude	Altitude (m above sea level)
Arica4	Chile	990 +/- 30	Arica, Chile, coastal	18.47S	70.32W	coastal
Arica5	Chile	780 +/- 30	Arica, Chile, coastal	18.47S	70.32W	coastal
Z2	Brazil	570 +/- 60	Brazil:Peruacu Valley, Boquete cave	15S	44W	700
Z6	Brazil	630+- 60	Brazil:Peruacu Valley, Lapa de Hora	15S	44W	700
Z61	Peru	800 +/- 30	Peru:Ancash	8.531S	78.341W	200
Z64	Peru	630 +/- 30	Peru:Ancash	9.064S	77.564W	3990
Z65	Peru	970 +/- 30	Peru:Inca	14.433S	75.342W	220
Z66	Argentina	1010 +/- 30	Argentina:Catamarca	27.342S	66.550W	2465
Z67	Argentina	100 +/- 30	Argentina:Jujuy	23.240S	66.211W	3700
EG84	Honduras	1870 – 1740	El Gigante rock shelter	14.22N	88.06W	NA
EG85	Honduras	2300 – 2070	El Gigante rock shelter	14.22N	88.06W	NA
EG90	Honduras	2300 – 2120	El Gigante rock shelter	14.22N	88.06W	NA
Tehua162	Mexico	5310	Mexico: Tehuacan, Puebla	18.46N	97.39W	NA
SM3	Mexico	4190 +/- 30	Mexico: San Marcos cave, Tehuacan Valley	17.48N	97.03W	NA
SM5	Mexico	4190 +/- 30	Mexico: San Marcos cave, Tehuacan Valley	17.48N	97.03W	NA
SM10	Mexico	4240 +/- 30	Mexico: San Marcos cave, Tehuacan Valley	17.48N	97.03W	NA

* The latitude and longitude information for SM3 and SM10 were determined based on the Tehuacan Valley location as provided in 'Myxomycetes associated with dryland ecosystems of the Tehuacán-Cuicatlán Valley Biosphere Reserve, Mexico.'

Table S2. Paleogenetic characterization of archaeological Bolivian maize sequence samples with six libraries.

Sample	QC-passed reads	Total number of read mapped	Read mapped (%)	Mean Coverage	Std Coverage
aBMComb_rm5nt.rmDR.bam	299093147	33846381	11.32%	0.7667X	3.027X
Bolivian_Maize_1_ATCACG_L001_rm5nt.rmDR.bam	56128831	6402435	11.41%	0.1434X	0.6598X
Bolivian_Maize_2_CGATGT_L001_rm5nt.rmDR.bam	67115071	8050825	12.00%	0.1815X	0.7718X
Bolivian_Maize_3_TTAGGC_L001_rm5nt.rmDR.bam	53043360	5998148	11.31%	0.1399X	0.6726X
Bolivian_Maize_4_TGACCA_L001_rm5nt.rmDR.bam	10941693	1579877	14.44%	0.0371X	0.2633X
Bolivian_Maize_5_ACAGTG_L001_rm5nt.rmDR.bam	10694963	1652909	15.46%	0.0361X	0.2482X
Bolivian_Maize_6_GCCAAT_L001_rm5nt.rmDR.bam	101169229	10162187	10.04%	0.2287X	0.9215X

Table S3. The percentage of genomic sites covered at variable depths in the archaeological Bolivian maize (aBM) sample. (aBMComb_rm5nt.rmDR.bam)

Depth	aBM_Combbam
1X	27.75%
2X	14.14%
3X	8.27%
4X	5.18%
5X	3.41%
6X	2.35%
7X	1.7%
8X	1.28%
9X	1%
>=10X	9.78%