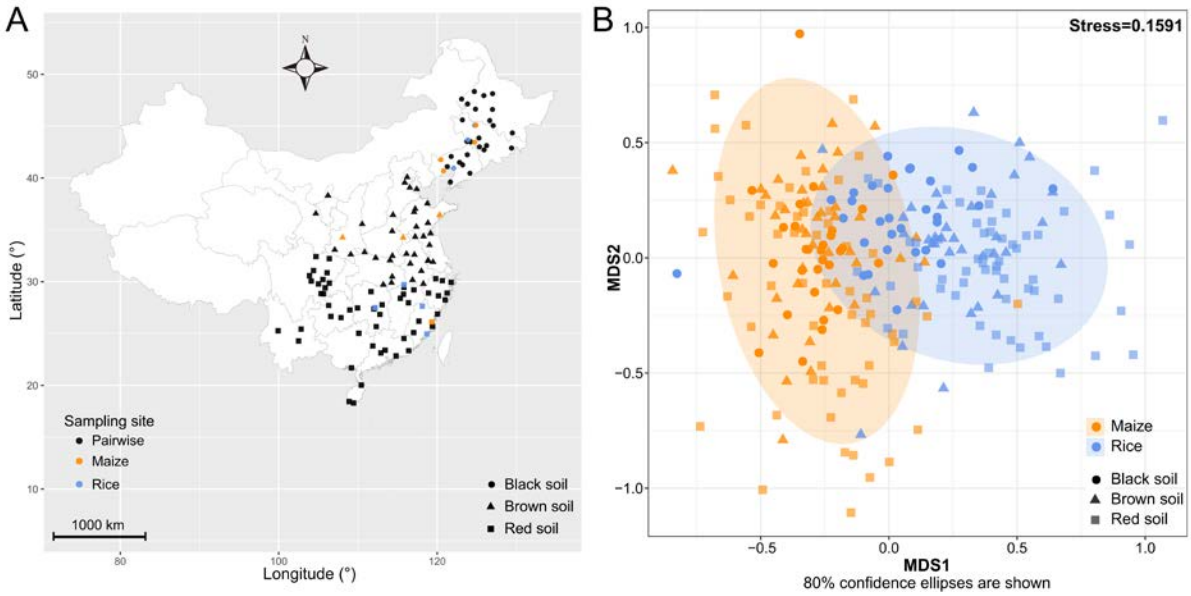
**Figure S1**


A
N
Latitude (°)
Longitude (°)
Sampling site
Pairwise
Maize
Rice
1000 km
Black soil
Brown soil
Red soil
B
Stress=0.1591
MDS2
MDS1
Maize
Rice
Black soil
Brown soil
Red soil
80% confidence ellipses are shown