## Source Codes & Datasets

The relevant source codes & datasets of salt-tolerant FNB screening in the manuscript can be found under these folders. All the codes and data can be read by MATLAB program:

* T1d-3d-5d-SpectRGBFeatures84 :

The 84 spectral features of 1044 FNB mutants, 18 A17CK and 18 A17SS , was extracted by ASD hyperspectral spectroradiometer and RGB images in the 1d, 3d, 5d salt stress.

* MetaTBT\_5d-MSR\_101Meta:

The 101 Metabolomic data of 1044 FNB mutants, 18 A17CK and 18 A17SS , was extracted by ASD hyperspectral spectroradiometer and RGB images in 5d salt stress .

* SaltToleranceFNBScreening:

This is the main code for screening salt-tolerant FNB mutants, including four modules: First screening, Second screening, PCA Analysis of salt-tolerant FNB, and result statistics module.

## System Requirements

* Windows 11 64-bit operating system
* MATLAB R2022a
* Modern x86 CPU (we recommend octacore or better)
* 16 GB RAM (we recommend 32 GB or better)
* 1 GB disk / storage space

## Reference

Xiong Deng, Haiyang Pang, Yao Fu, Jingyu Zhang, Kang Chong. 'Targeted combining hyperspectral and metabolomic data as a tool for efficient salt-tolerant phenotype discrimination'.