So you think you can cluster?

In our paper we clustered the accessions based on the ratios of: average Lateral Root Length per Main Root Length, Lateral Root Length per Main Root Length, and Main Root Length per Total Root Size in all conditions studied. However, we realize that such a cluster analysis can be performed for any set of chosen traits. Therefore, in this tab we integrated our dataset so that you can perform your own cluster analysis on the traits of your interest.

| Let's cluster | Step 1 | Step 2 | Step 3 | Step 4 |

Have a look at the dendrogram by clicking on the tab >> Accession Dendrogram << and determine the number of clusters that you would like to make by choosing a value on the x-axis representing the Ward linkage between the accessions

ALERT: Please note that if you chose too many clusters this analysis will not be informative and the subsequent post-hoc analysis will not be possible. We advise for the optimal number of clusters between three to ten.

Below please enter the value at which you wish to cut the dendrogram - make sure to enter ONLY numerical values. IF you wish to enter values < 1, please use dot - as in 0.01.

Cut tree at

4

Put the distance value here

| Clustering Heat Map | Accession Dendrogram | Cluster Validation |

The below graph represents a dendrogram of the accessions and how they are clustered based on the selected traits in **Step1** . The accessions are clustered using Ward linkage method and the x-axis is represents the distance between the individual accessions.

Select the distance at which you would like to divide accessions into groups