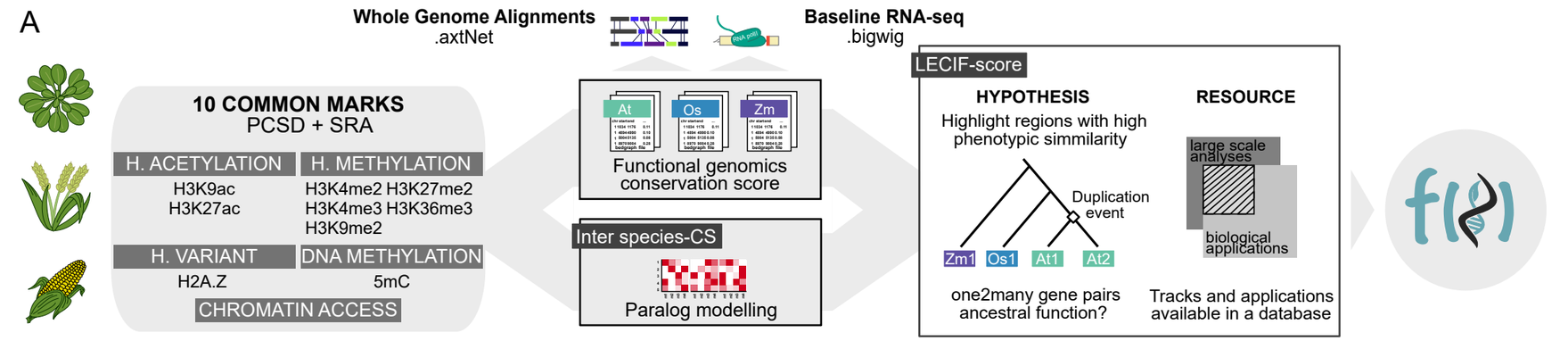
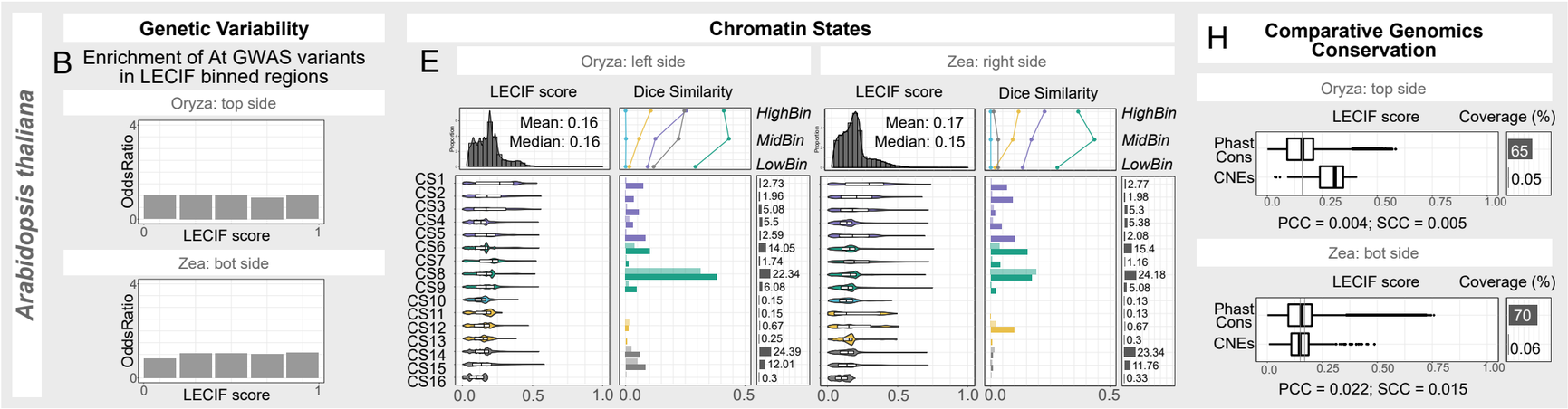
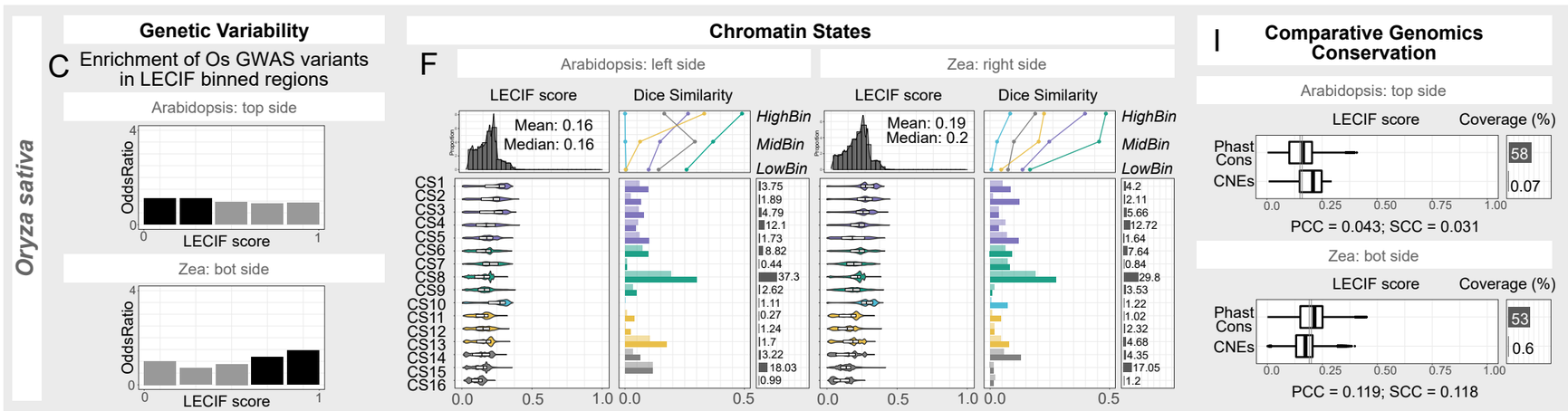
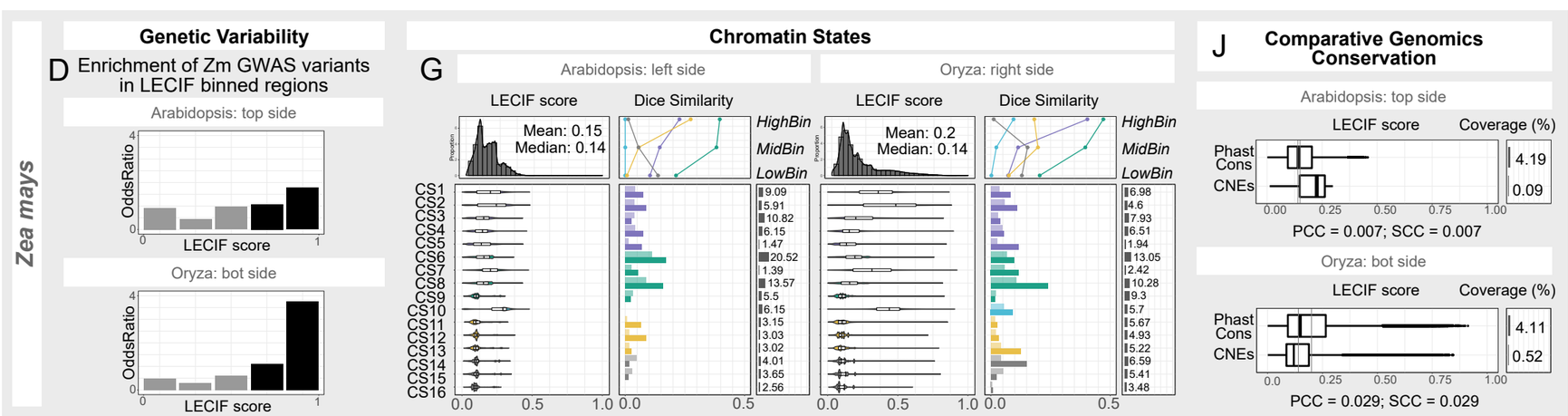

A
Whole Genome Alignments
.axtNet
Baseline RNA-seq
.bigwig
10 COMMON MARKS
PCSD + SRA
H. ACETYLATION
H3K9ac
H3K27ac
H. METHYLATION
H3K4me2 H3K27me2
H3K4me3 H3K36me3
H3K9me2
H. VARIANT
H2A.Z
DNA METHYLATION
5mC
CHROMATIN ACCESS
At
Os
Zm
Functional genomics conservation score
Inter species-CS
Paralog modelling
LECIF-score
HYPOTHESIS
Highlight regions with high phenotypic simmilarity
Duplication event
Zm1
Os1
At1
At2
one2many gene pairs ancestral function?
RESOURCE
large scale analyses
biological applications
Tracks and applications available in a database
f(x)


Arabidopsis thaliana
Genetic Variability
B Enrichment of At GWAS variants in LECIF binned regions
Oryza: top side
Zea: bot side
OddsRatio
LECIF score
Chromatin States
E
Oryza: left side
Zea: right side
LECIF score
Dice Similarity
Mean: 0.16
Median: 0.16
Mean: 0.17
Median: 0.15
HighBin
MidBin
LowBin
CS1
CS2
CS3
CS4
CS5
CS6
CS7
CS8
CS9
CS10
CS11
CS12
CS13
CS14
CS15
CS16
Comparative Genomics Conservation
H
Oryza: top side
Zea: bot side
Phast Cons
CNEs
Coverage (%)
65
0.05
PCC = 0.004; SCC = 0.005
70
0.06
PCC = 0.022; SCC = 0.015


Oryza sativa
Genetic Variability
C Enrichment of Os GWAS variants in LECIF binned regions
Arabidopsis: top side
Zea: bot side
OddsRatio
LECIF score
Chromatin States
F
Arabidopsis: left side
Zea: right side
LECIF score
Dice Similarity
Mean: 0.16
Median: 0.16
Mean: 0.19
Median: 0.2
HighBin
MidBin
LowBin
CS1
CS2
CS3
CS4
CS5
CS6
CS7
CS8
CS9
CS10
CS11
CS12
CS13
CS14
CS15
CS16
Comparative Genomics Conservation
I
Arabidopsis: top side
Zea: bot side
Phast Cons
CNEs
Coverage (%)
58
0.07
PCC = 0.043; SCC = 0.031
53
0.6
PCC = 0.119; SCC = 0.118


Zea mays
Genetic Variability
D Enrichment of Zm GWAS variants in LECIF binned regions
Arabidopsis: top side
Oryza: bot side
OddsRatio
LECIF score
Chromatin States
G
Arabidopsis: left side
Oryza: right side
LECIF score
Dice Similarity
Mean: 0.15
Median: 0.14
Mean: 0.2
Median: 0.14
HighBin
MidBin
LowBin
CS1
CS2
CS3
CS4
CS5
CS6
CS7
CS8
CS9
CS10
CS11
CS12
CS13
CS14
CS15
CS16
Comparative Genomics Conservation
J
Arabidopsis: top side
Oryza: bot side
Phast Cons
CNEs
Coverage (%)
4.19
0.09
PCC = 0.007; SCC = 0.007
4.11
0.52
PCC = 0.029; SCC = 0.029