



ONE DAY ONE GENOME

Sesame phyllody phytoplasma

THE GENOME PAVE WAYS FOR STRATEGIES TO CURB A PATHOGEN
THAT SILENTLY ERODES INDIA'S OILSEED PRODUCTIVITY



Quality of Genome Assembly and Annotation:

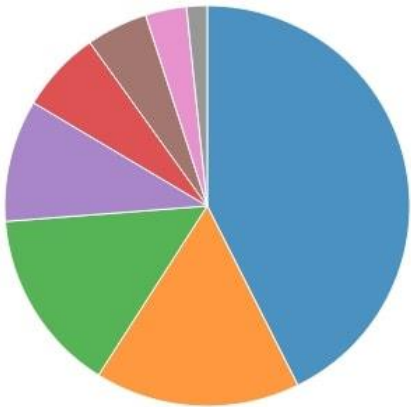
Results from indigenously developed **BHARAT** analysis pipeline: (**B**acterial **H**ybrid genome **A**ssembly and **R**apid **A**nnotation **T**oolset)
Subsystem Analysis

Table 1: Assembly Details

Contigs	60
GC Content	23.68
Contig L50	7
Genome length	553,228 bp
Contig N50	30,531

Table 2: Annotated Genome Features

CDS	522
tRNA	18
Repeat Regions	0
rRNA	2



Subsystem (Subsystems, Genes)

- PROTEIN PROCESSING (26, 57)
- STRESS RESPONSE, DEFENSE, VIRULENCE (10, 25)
- RNA PROCESSING (9, 22)
- METABOLISM (6, 8)
- DNA PROCESSING (4, 11)
- CELLULAR PROCESSES (3, 6)
- MEMBRANE TRANSPORT (2, 4)
- ENERGY (1, 2)

Genome Assembly

Table 3: Antimicrobial Resistance Genes

AMR Mechanism	Genes
Antibiotic target in susceptible species	EF-G, EF-Tu, folA, Dfr, gyrA, gyrB, Iso-tRNA, rpoB, rpoC, S10p, S12p
Gene conferring resistance via absence	gidB
Protein altering cell wall charge conferring antibiotic resistance	PgsA

