



#OneDayOneGenomeInitiative

Xanthomonas oryzae pv. *oryzicola* (Xoc)



Genomics

Completed genome decoding
using NGS technology



Agricultural Research

Insights into role in bacterial
leaf streak and host
interactions



Insight

Uncovering genetic
mechanisms of pathogenicity
and adaptability



Isolation

Isolated from rice plants in
Kurnool, India



Translation

Identified targets for resistant
rice varieties and treatments



Xanthomonas oryzae pv. *Oryzicola*

Genome Accession Number: INS0009880

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)

Table 1: Assembly Details	
Contigs	1,380
GC Content	63.64
Contig L50	430
Genome length	2,817,995 bp
Contig N50	2,205

Table 2: Annotated Genome Features	
CDS	3,708
tRNA	20
Repeat Regions	0

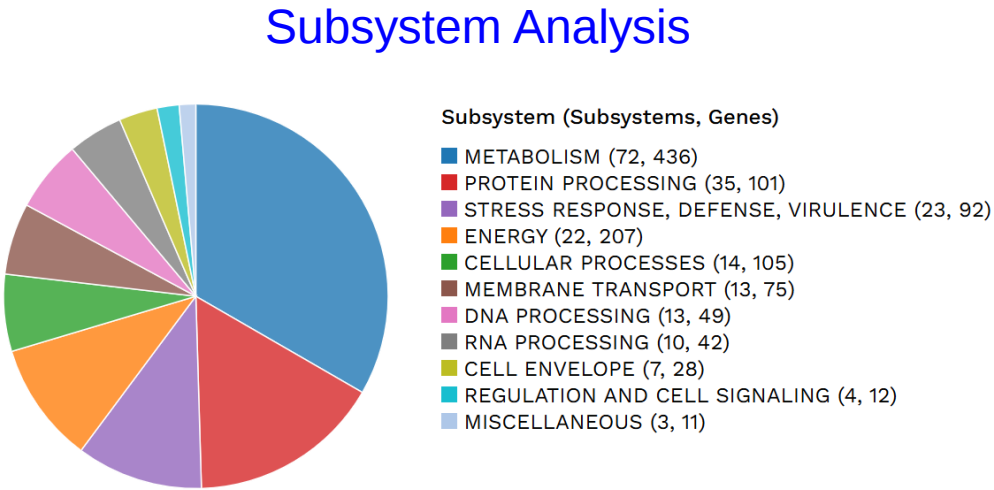


Table 3: Antimicrobial Resistance Genes	
AMR Mechanism	Genes
Antibiotic target replacement protein	fabV
Antibiotic target in susceptible species	Alr, Ddl, dxr, EF-G, folA, Dfr, folP, gyrA, gyrB, Iso-tRNA, kasA, MurA, rho, rpoB, rpoC
Efflux pump conferring antibiotic resistance	EmrAB-TolC, MdtABC-TolC, MexCD-OprJ
Protein altering cell wall charge conferring antibiotic resistance	GdpD, PgsA
Regulator modulating expression of antibiotic resistance genes	OxyR

