



जैवप्रौद्योगिकी विभाग
DEPARTMENT OF
BIOTECHNOLOGY



ONE DAY ONE GENOME

Genome of the Day: *Burkholderia symbiotica ciceri*

Unique Indian isolate
from Chickpea root
nodules



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	110
GC Content	66.87
Contig L50	14
Genome length	7,779,568 bp
Contig N50	194,990

Table 2: Annotated Genome Features	
CDS	7,696
tRNA	61
rRNA	3
Repeat Regions	0

Table 3: Antimicrobial Resistance Genes	
AMR Mechanism	Genes
Antibiotic activation enzyme	KatG
Antibiotic target in susceptible species	Alr, Ddl, dxr, EF-G, EF-Tu, folA, Dfr, folP, gyrA, gyrB, Iso-tRNA, kasA, MurA, rho, rpoB, rpoC, S10p, S12p
Antibiotic target replacement protein	fabV
Efflux pump conferring antibiotic resistance	EmrAB-OMF, EmrAB-ToIC, MdtABC-OMF, MdtABC-ToIC, MexXY-OMP
Gene conferring resistance via absence	gidB
Protein altering cell wall charge conferring antibiotic resistance	GdpD, PgsA
Regulator modulating expression of antibiotic resistance genes	H-NS, OxyR

