



Government of India
Ministry of Science & Technology
Department of Biotechnology



One Day One Genome

Bacterium strain R63

**Actively produces biochemical enzymes
for phosphate solubilization activity**



Enterobacter sp.

Genome Accession Number: **SRR32634849**

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	42
GC Content	53.05
Contig L50	4
Genome length	4,640,995 bp
Contig N50	393,216

Table 2: Annotated Genome Features	
CDS	4,547
tRNA	75
rRNA	6

Subsystem Analysis

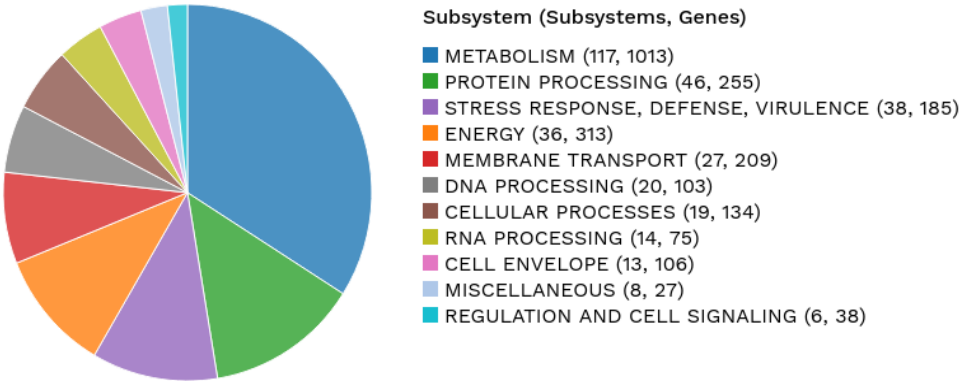


Table 3: Antimicrobial Resistance Genes	
AMR Mechanism	Genes
Antibiotic activation enzyme	KatG
Antibiotic target in susceptible species	Alr, Ddl, dxr, EF-G, EF-Tu, folA, Dfr, folP, gyrA, gyrB, inhA, fabI, Iso-tRNA, kasA, MurA, rho, rpoB, rpoC, S10p, S12p
Protein altering cell wall charge conferring antibiotic resistance	GdpD, PgsA
Efflux pump conferring antibiotic resistance	AcrAB-TolC, AcrAD-TolC, AcrEF-TolC , AcrZ, EmrAB-OMF, EmrAB-TolC, EmrD, MacA, MacB, MdfA/Cmr, MdtABC-TolC, MdtL, SugE, TolC/OpmH
Gene conferring resistance via absence	gidB
Regulator modulating expression of antibiotic resistance genes	AcrAB-TolC, EmrAB-TolC, H-NS, OxyR

Genome Assembly

