



Government of India
Ministry of Science & Technology
Department of Biotechnology



ONE DAY ONE GENOME

Bacillus altitudinis

THE MICROBE AIDS IN AIDING CLINICAL
DIAGNOSTICS AND NOVEL THERAPEUTIC STRATEGIES

Quality of Genome Assembly and Annotation:

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

Table 1: Assembly Details	
Contigs	856
GC Content	41.25
Contig L50	220
Genome length	2,219,165 bp
Contig N50	3,043

Table 2: Annotated Genome Features	
CDS	2,996
tRNA	12
rRNA	1

Subsystem Analysis

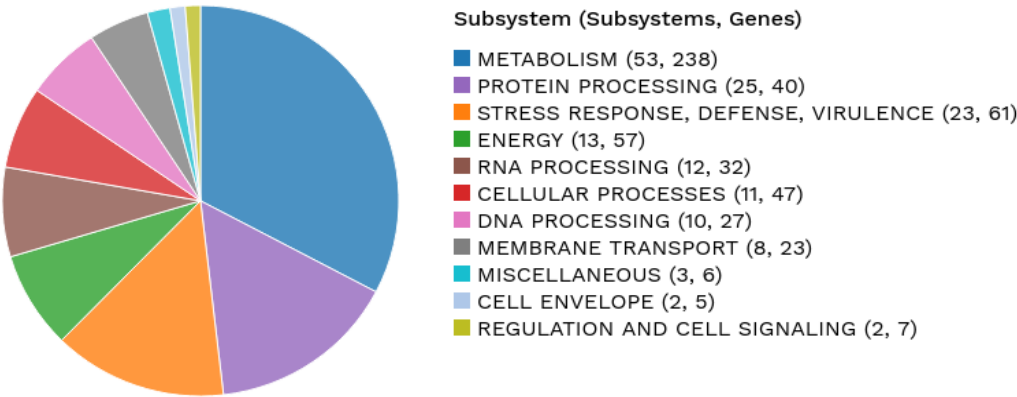


Table 3: Antimicrobial Resistance Genes	
AMR Mechanism	Genes
Antibiotic inactivation enzyme	CatA6 family, FosB
Antibiotic target protection protein	BcrC
Antibiotic target in susceptible species	Alr, EF-G, EF-Tu, folA, Dfr, gyrA, gyrB, inhA, fabI, Iso-tRNA, kasA, MurA, rpoB, S12p
Protein altering cell wall charge conferring antibiotic resistance	MprF
Efflux pump conferring antibiotic resistance	BceA, BceB, EbrA, EbrB
Gene conferring resistance via absence	gidB
Regulator modulating expression of antibiotic resistance genes	BceR, BceS, LiaF, LiaR, LiaS

Genome Assembly

