



Government of India
Ministry of Science & Technology
Department of Biotechnology



ONE DAY ONE GENOME

Alkalihalobacterium chitinilyticum



***USED IN DETERGENT FORMULATIONS AND
OTHER INDUSTRIAL PROCESSES REQUIRING
ENZYMES THAT FUNCTION IN HIGH PH
ENVIRONMENTS***

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	49
GC Content	37.70
Contig L50	7
Genome length	4,882,427 bp
Contig N50	231,606

Table 2: Annotated Genome Features	
CDS	4,854
tRNA	158
Repeat Regions	7
rRNA	26

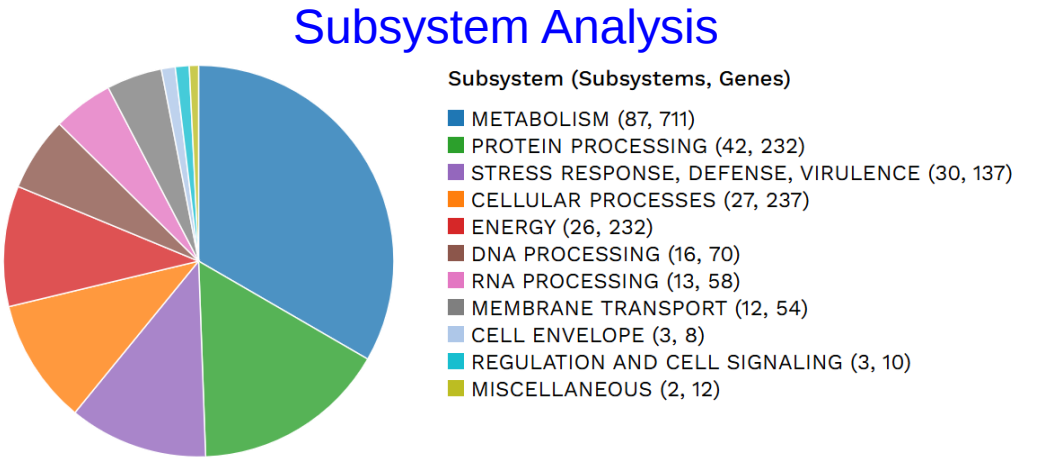


Table 3: Antimicrobial Resistance Genes	
AMR Mechanism	Genes
Antibiotic target in susceptible species	Alr, Ddl, dxr, EF-G, EF-Tu, folA, Dfr, folP, gyrA, gyrB, inhA, fabI, Iso-tRNA, kasA, MurA, rho, rpoB, rpoC, S10p, S12p
Efflux pump conferring antibiotic resistance	YkkCD
Protein involved in antibiotic sequestration	FabK-like
Regulator modulating expression of antibiotic resistance genes	LiaR, LiaS
Protein altering cell wall charge conferring antibiotic resistance	GdpD, PgsA

