



Government of India
Ministry of Science & Technology
Department of Biotechnology



NCCS
NATIONAL CENTRE FOR CELL SCIENCE

One Day One Genome



Methylophaga lonarensis

The extremozymes could be repurposed for **waste treatment** and **bio sustainable applications**.



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	116
GC Content	49.67
Contig L50	21
Genome length	2,637,625 bp
Contig N50	45,830

Table 2: Annotated Genome Features

CDS	2,743
tRNA	41
Repeat Regions	51
rRNA	9

Subsystem Analysis

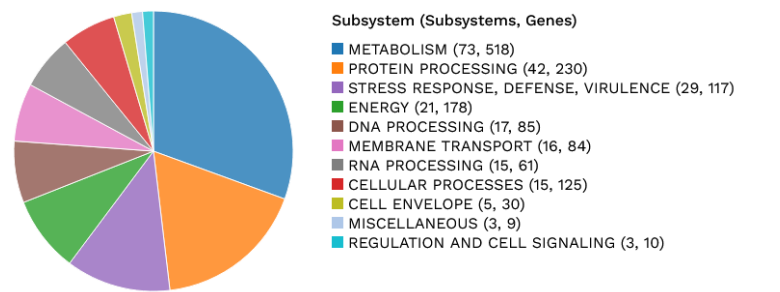


Table 3: Antimicrobial Resistance Genes

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
Gene conferring resistance via absence	gidB

Genome Assembly

