Government of India
Ministry of Science & Technology
Department of Biotechnology

BRIC IBSD

ONE DAY ONE GENOME

Paraclostridium bifermentans

It is a probioticbutyrate producer with food industrial applications

Paraclostridium bifermentans **Genome Accession Number: PRJNA1243023**

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	24
GC Content	28.16
Contig L50	1
Genome length	3,424,825 bp
Contig N50	2,198,435

Table 2: Annotated Genome Features	
CDS	3,307
tRNA	59
Repeat Regions	0
rRNA	15

Subsystem Analysis

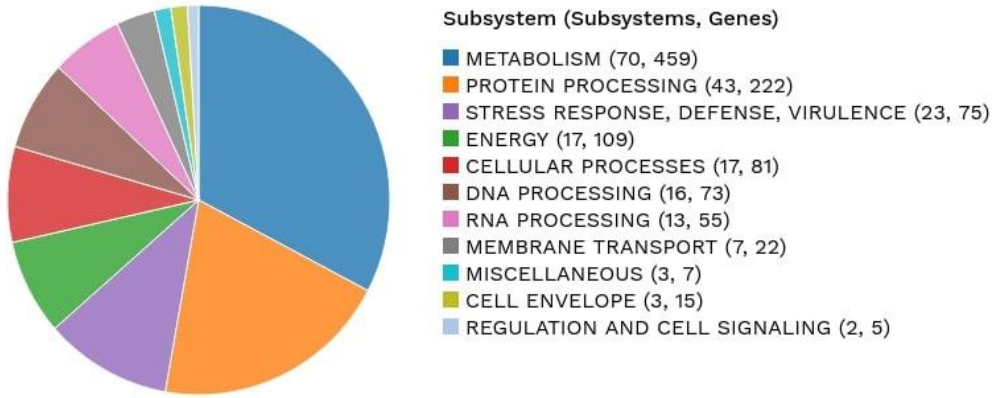

Table 3: Antimicrobial Resistance Genes	
AMR Mechanism	**Genes**
Antibiotic target in susceptible species	Alr, Ddl, dxr, EF-G, EF-Tu, folA, Dfr, folP, gyrA, gyrB, Ile-tRNA, kasA, MurA, rho, rpoB, rpoC, S10p, S12p
Antibiotic inactivation enzyme	NimB
Gene conferring resistance via absence	gidB
Antibiotic target replacement protein	FabK
Protein altering cell wall charge conferring antibiotic resistance	GdpD, PgsA, MprF
Protein involved in antibiotic sequestration	FabK-like

Genome Assembly