



Government of India  
Ministry of Science & Technology  
Department of Biotechnology

BRIC IBSD

# ONE DAY ONE GENOME



*Ligilactobacillus pobuzihii*

Selected as a starter culture for  
non-salted fish fermentation.

## Quality of Genome Assembly and Annotation:

Results from indigenously developed **BHARAT** analysis pipeline: (**Bacterial Hybrid genome Assembly and Rapid Annotation Toolset**)

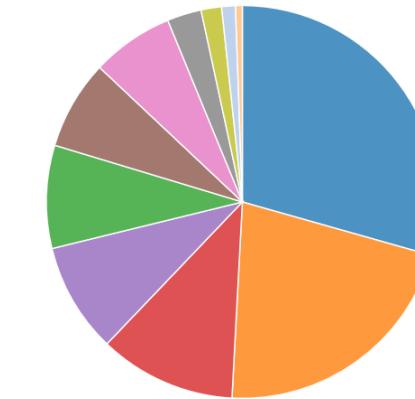
Table 1: Assembly Details

Contigs	38
GC Content	37.86
Contig L50	7
Genome length	2,350,214 bp
Contig N50	119,998

Table 2: Annotated Genome Features

CDS	2,267
tRNA	58
Repeat Regions	12
rRNA	9

## Subsystem Analysis



## Subsystem (Subsystems, Genes)

- METABOLISM (52, 233)
- PROTEIN PROCESSING (38, 181)
- STRESS RESPONSE, DEFENSE, VIRULENCE (20, 72)
- DNA PROCESSING (16, 69)
- ENERGY (15, 105)
- CELLULAR PROCESSES (13, 62)
- RNA PROCESSING (12, 43)
- MEMBRANE TRANSPORT (5, 14)
- REGULATION AND CELL SIGNALING (3, 9)
- CELL ENVELOPE (2, 2)
- MISCELLANEOUS (1, 1)

## Genome Assembly

Table 3: Antimicrobial Resistance Genes

AMR Mechanism	Genes
Antibiotic target in susceptible species	Alr, Ddl, EF-G, EF-Tu, folA, Dfr, gyrA, gyrB, inhA, fabI, Iso-tRNA, kasA, MurA, rho, rpoB, rpoC, S10p, S12p
Gene conferring resistance via absence	gidB
Protein altering cell wall charge conferring antibiotic resistance	GdpD, PgsA

