



Government of India
Ministry of Science & Technology
Department of Biotechnology

सत्यमेव जयते



ONE DAY ONE GENOME

Gulbenkiana indica



**The novel species enhances our understanding of
microbial diversity in geothermal habitats**

Gulbenkiania indica

Genome Accession Number: LION00000000

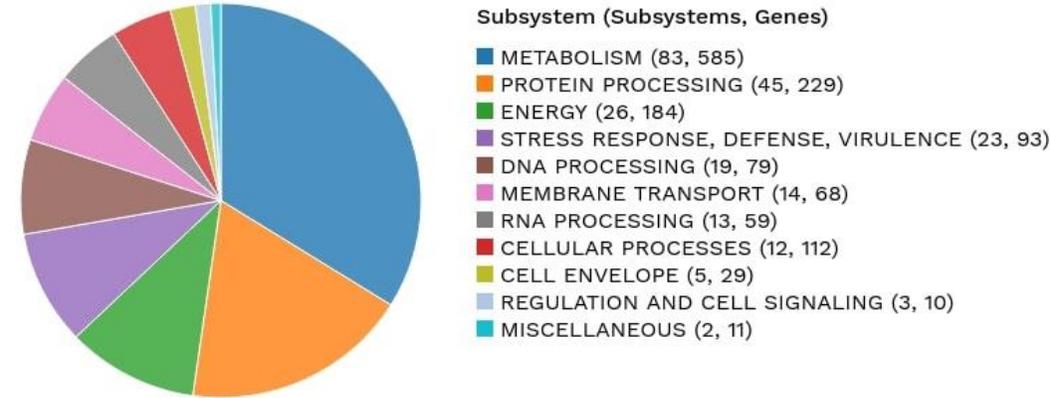
Quality of Genome Assembly and Annotation:

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 | 20 |
| GC Content | 63.64 |
| Contig L50 | 3 |
| Genome length | 2,848,002 bp |
| Contig N50 | 508,064 |

| Table 2: Annotated Genome Features | |
|------------------------------------|-------|
| CDS | 2,757 |
| tRNA | 62 |
| Repeat Regions | 7 |
| rRNA | 5 |

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, inhA, fabI, Iso-tRNA, kasA, MurA, rho, rpoB, rpoC, S10p, S12p |
| Efflux pump conferring antibiotic resistance | EmrAB-TolC, MacA, MacB |
| Gene conferring resistance via absence | gidB |
| Protein altering cell wall charge conferring antibiotic resistance | GdpD, PgsA |
| Regulator modulating expression of antibiotic resistance genes | EmrAB-TolC, OxyR |

Genome Assembly

