



ONE DAY ONE GENOME

Burkholderia gladioli

The bacterial genome exhibits broad-spectrum
antifungal and antibacterial activities



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	155
GC Content	68.07
Contig L50	12
Genome length	8,020,595 bp
Contig N50	283,251

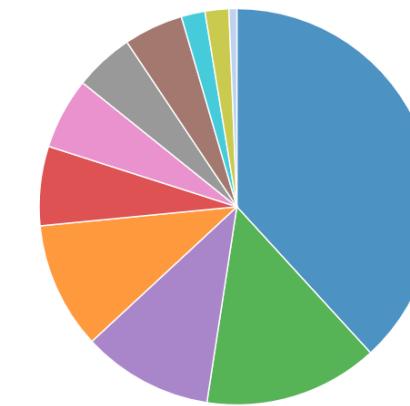
Table 2: Annotated Genome Features

CDS	7,659
tRNA	54
Repeat Regions	0
rRNA	9

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, Iso-tRNA, kasA, MurA, rho, rpoB, rpoC, S10p, S12p
Efflux pump conferring antibiotic resistance	EmrAB-OMF, EmrAB-TolC, MacA, MacB, MdtABC-OMF, MdtABC-TolC
Regulator modulating expression of antibiotic resistance genes	H-NS, OxyR
Protein modulating permeability to antibiotic	OprB family, OprD family
Protein altering cell wall charge conferring antibiotic resistance	GdpD, PgsA

Subsystem Analysis



Subsystem (Subsystems, Genes)

- METABOLISM (118, 1156)
- PROTEIN PROCESSING (44, 271)
- STRESS RESPONSE, DEFENSE, VIRULENCE (33, 188)
- ENERGY (32, 356)
- MEMBRANE TRANSPORT (20, 245)
- DNA PROCESSING (18, 86)
- RNA PROCESSING (15, 74)
- CELLULAR PROCESSES (15, 166)
- MISCELLANEOUS (6, 44)
- CELL ENVELOPE (6, 47)
- REGULATION AND CELL SIGNALING (2, 13)

Genome Assembly

