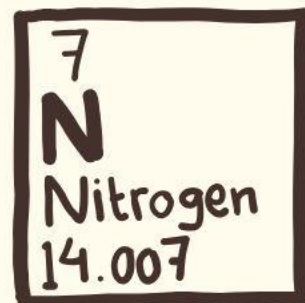




Government of India
Ministry of Science & Technology
Department of Biotechnology



IBSD
Promoting Bioresources



ONE DAY ONE GENOME

Allorhizobium undicola

The isolate grows
actively in nitrogen free
medium and produces
ample ammonia



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	96
GC Content	59.43
Contig L50	13
Genome length	4,033,269 bp
Contig N50	112,335

Table 2: Annotated Genome Features	
CDS	3,891
tRNA	46
rRNA	4

Subsystem Analysis

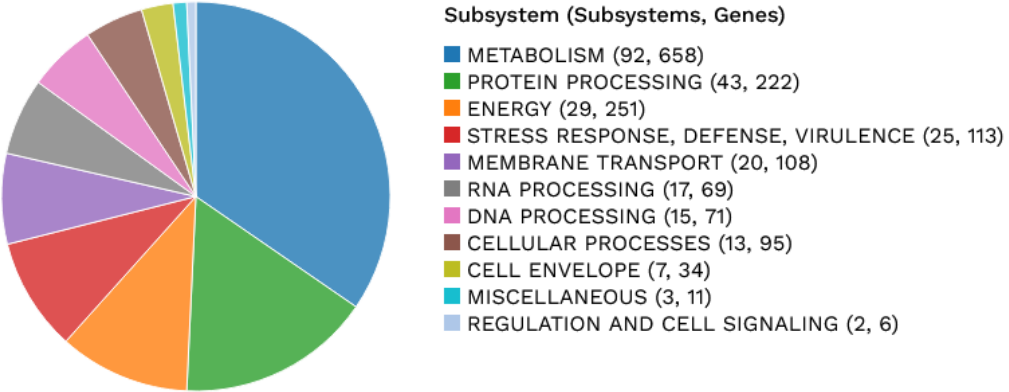


Table 3: Antimicrobial Resistance Genes	
AMR Mechanism	Genes
Antibiotic activation enzyme	KatG
Antibiotic target in susceptible species	Alr, Ddl, dxr, EF-G, EF-Tu, folA, Dfr, folP, gyrA, gyrB, inhA, fabI, Iso-tRNA, kasA, MurA, rho, rpoB, rpoC, S10p, S12p
Protein altering cell wall charge conferring antibiotic resistance	GdpD, PgsA
Efflux pump conferring antibiotic resistance	MacA, MacB, MdtABC-TolC
Gene conferring resistance via absence	gidB
Regulator modulating expression of antibiotic resistance genes	OxyR

Genome Assembly

