Government of India
Ministry of Science & Technology
Department of Biotechnology

सत्यमेव जयते

BRIC a DBT Organization

INSTITUTE OF LIFE SCIENCES
SEEKING INSIGHTS INTO LIFE

ONE DAY ONE GENOME

Agrobacterium pusense sp. nov.

Candidate for soil health enhancement and future plant-microbe interaction studies

***Agrobacterium pusense* sp. nov.**

Genome Accession Number: FNBB00000000

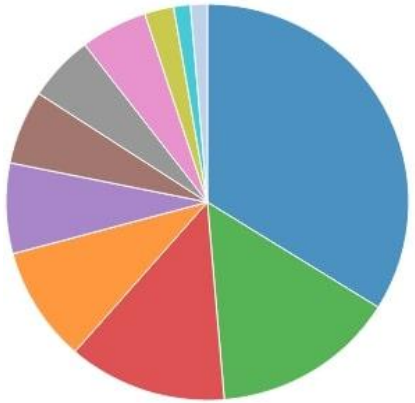
Quality of Genome Assembly and Annotation:

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	28
GC Content	59.23
Contig L50	4
Genome length	5,283,618 bp
Contig N50	405,057

Table 2: Annotated Genome Features	
CDS	5,294
tRNA	53
Repeat Regions	0
rRNA	3

Subsystem Analysis



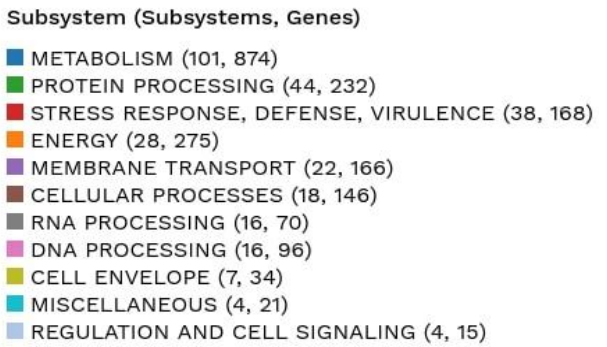


Table 3: Antimicrobial Resistance Genes	
AMR Mechanism	**Genes**
Antibiotic target in susceptible species	Alr, Ddl, dxr, EF-G, EF-Tu, folA, Dfr, folP, gyrA, gyrB, inhA, fabI, Iso-tRNA, kasA, MurA, rho, rpoB, rpoC, S10p, S12p
Antibiotic inactivation enzyme	AAC(6')-Ic,f,g,h,j,k,l,r-z, CatB family
Efflux pump conferring antibiotic resistance	MacA, TriABC-OpmH
Gene conferring resistance via absence	gidB
Protein altering cell wall charge conferring antibiotic resistance	GdpD, PgsA
Regulator modulating expression of antibiotic resistance genes	OxyR

Genome Assembly