



Government of India
Ministry of Science & Technology
Department of Biotechnology



ONE DAY ONE GENOME

Mammaliicoccus sciuri

ISOLATED FROM SEWAGE TREATMENT
PLANT, HARBOURS MULTIPLE AMR GENES

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	8
GC Content	32.27
Contig L50	1
Genome length	3,244,414 bp
Contig N50	2,988,876

Table 2: Annotated Genome Features	
CDS	3,968
tRNA	61
Repeat Regions	93
rRNA	19

Subsystem Analysis

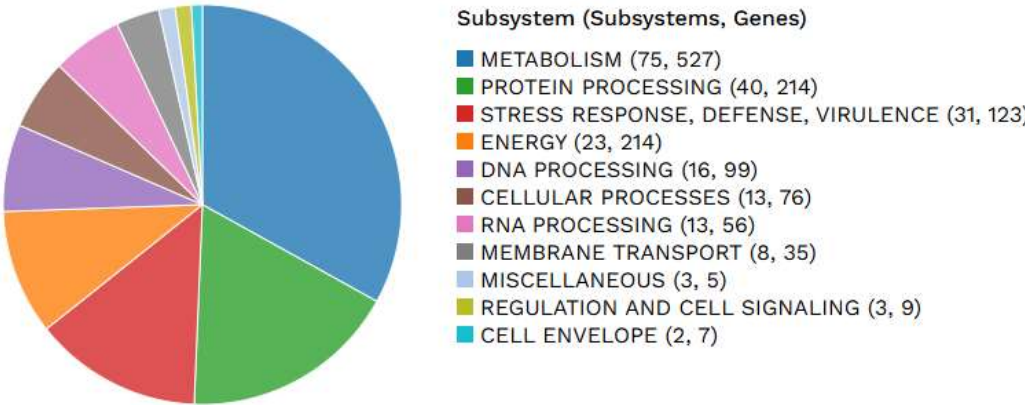


Table 3: Antimicrobial Resistance Genes	
AMR Mechanism	Genes
Antibiotic inactivation enzyme	BlaZ family, FosB, Mph(C) family
Antibiotic target protection protein	Sal(A)
Antibiotic target in susceptible species	Alr, Ddl, dxr, EF-G, EF-Tu, folA, Dfr, folP, gyrA, gyrB, inhA, fabI, Iso-tRNA, kasA, MurA, rho, rpoB, rpoC, S10p, S12p
Protein altering cell wall charge conferring antibiotic resistance	GdpD, MprF, PgsA
Efflux pump conferring antibiotic resistance	BceA, BceB, NorA
Regulator modulating expression of antibiotic resistance genes	BceR, LiaF, LiaR, LiaS

Genome Assembly

