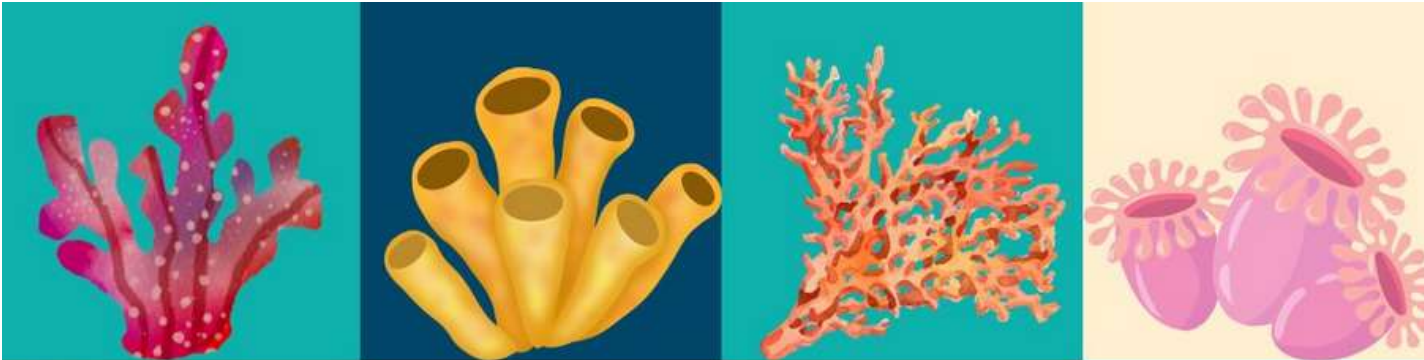


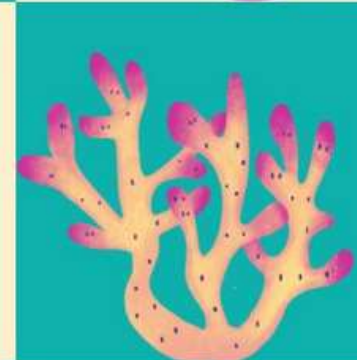


Government of India
Ministry of Science & Technology
Department of Biotechnology



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“The discovery of this microbe will underscore
the remarkable microbial diversity harbored
within coral ecosystems”



ONE DAY ONE GENOME



Salinicola acroporae

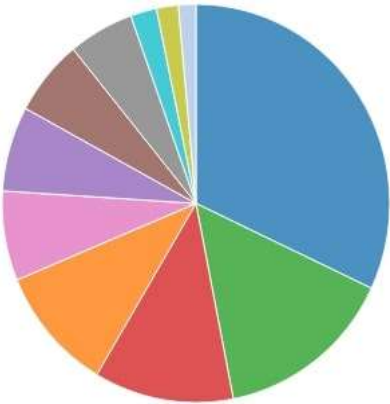


Quality of Genome Assembly and Annotation:

Results from indigenously developed **BHARAT** analysis pipeline: (**B**acterial **H**ybrid genome **A**ssembly and **R**apid **A**nnnotation **T**oolset)

Table 1: Assembly Details	
Contigs	1
GC Content	63.61
Contig L50	1
Genome length	4,443,536 bp
Contig N50	4,443,536

Table 2: Annotated Genome Features	
CDS	4,443
tRNA	71
Repeat Regions	93
rRNA	12



Subsystem Analysis

Subsystem (Subsystems, Genes)	
METABOLISM	(88, 699)
PROTEIN PROCESSING	(41, 220)
STRESS RESPONSE, DEFENSE, VIRULENCE	(32, 148)
ENERGY	(28, 258)
DNA PROCESSING	(20, 89)
MEMBRANE TRANSPORT	(19, 136)
CELLULAR PROCESSES	(17, 124)
RNA PROCESSING	(15, 86)
MISCELLANEOUS	(6, 27)
CELL ENVELOPE	(5, 27)
REGULATION AND CELL SIGNALING	(4, 20)

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, MdtABC-TolC, TolC/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

