



Government of India
Ministry of Science & Technology
Department of Biotechnology



ONE DAY ONE GENOME

Vibrio alginolyticus novel sp.

Isolated from the coral *Pocillopora verrucosa* in the Andaman Sea the microbe has implications in aquaculture management, and environmental monitoring.



Vibrio alginolyticus

Genome Accession Number: WAHT00000000

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	9
GC Content	44.52
Contig L50	2
Genome length	5,308,803 bp
Contig N50	1,900,961

Table 2: Annotated Genome Features	
CDS	4,996
tRNA	94
Repeat Regions	144
rRNA	17

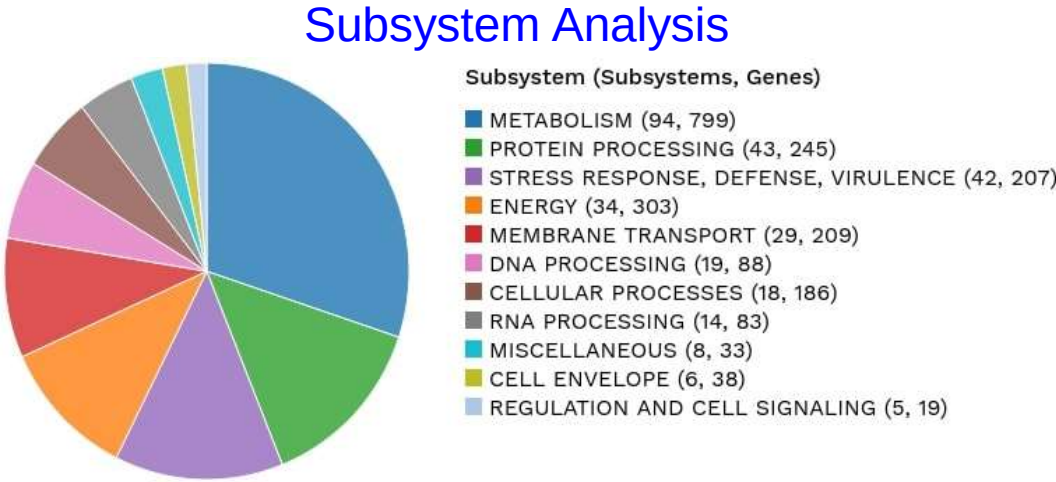


Table 3: Antimicrobial Resistance Genes	
AMR Mechanism	Genes
Antibiotic target in susceptible species	Alr, Ddl, dxr, EF-G, EF-Tu, folA, Dfr, folP, gyrA, gyrB, Iso-tRNA, kasA, MurA, rho, rpoB, rpoC, S10p, S12p
Antibiotic inactivation enzyme	CARB family
Efflux pump conferring antibiotic resistance	MacA, MacB, MdtL, Tet(35), 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	H-NS, OxyR

Genome Assembly

