



Government of India
Ministry of Science & Technology
Department of Biotechnology
संवर्धन उन्नति



One Day One Genome

Halopseudomonas maritima sp. nov



H. maritima demonstrates potential in steroid degradation pathways, a critical biochemical process with wide-ranging applications in pharma industry



Quality of Genome Assembly and Annotation:

Results from indigenously developed **BHARAT** analysis pipeline: (**Bacterial Hybrid genome Assembly and Rapid Annotation Toolset**)

Table 1: Assembly Details

Contigs	1
GC Content	61.28
Contig L50	1
Genome length	3,935,609 bp
Contig N50	3,935,609

Table 2: Annotated Genome Features

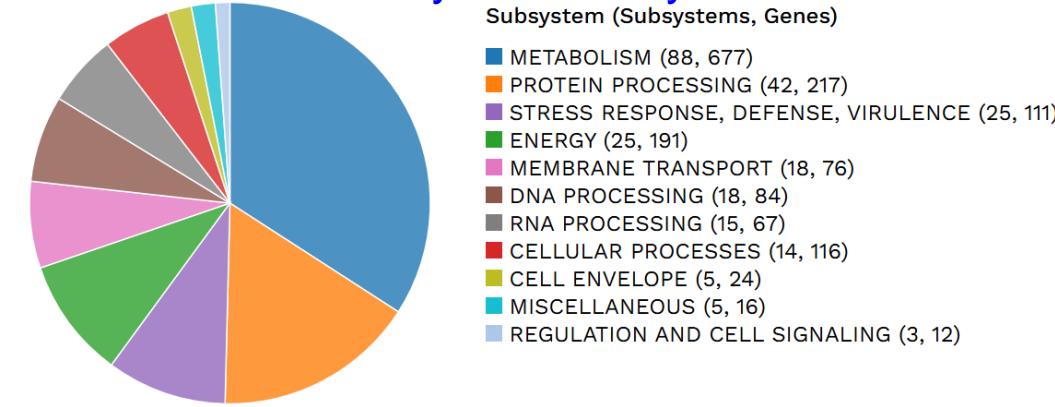
CDS	3,580
tRNA	57
Repeat Regions	58
rRNA	9

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
Efflux pump conferring antibiotic resistance	MdtABC-OMF, MdtABC-ToIC, ToIC/OpmH
Regulator modulating expression of antibiotic resistance genes	OxyR
Protein modulating permeability to antibiotic	OccD1/OprD, OccK8/OprE, OprD family
Protein altering cell wall charge conferring antibiotic resistance	GdpD, PgsA

Subsystem Analysis

Subsystem (Subsystems, Genes)



Genome Assembly

