## **One Day One Genome**

## Nitricola tapanii (MCC 2863) Accession: GCA\_008368715

Mining Micro Stress Busters from Lonar Lake BRIC-NCCS sequenced a novel *Nitricola species*, a salt-loving microbe isolated from India's unique – Lonar Lake

This extremophile could provide valuable insights into microbial survival strategies and potential applications in biotechnology

The genome sequence of this bacterium could help scientists understand the genetic basis of its ability to thrive in harsh environments

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

<b>Table 1.</b> Assembly Details		Table 2. Annotated Genome Features				
Contigs	19	CDS	2,615			
GC Content	50.79	tRNA	52			
Plasmids	0	Repeat Regions	34			
Contig L50	4	rRNA	5			
Genome Length	2,793,747 bp	Partial CDS	0			
Contig N50	282,347	Miscellaneous RNA	0			
Chromosomes	0	Job ID	annotation_2005510			
Genome		colotod	Canama Na of Dathor			

and motile

Organism name	Genome Accession number	Culture type	Isolated from	Pathogenicity	Genome Size	No. of Genes	Pathogenic genes	Importance
Nitricola tapanii (MCC 2863)	GCA 008368715	Gram negative, short-rod shaped	Lonar lake sediment	Unknown	2,793,747 base pair	2,615	MacA, MacB, GdpD, PgsA	Novel adaptation mechanisms to high

salt and alkalinity