

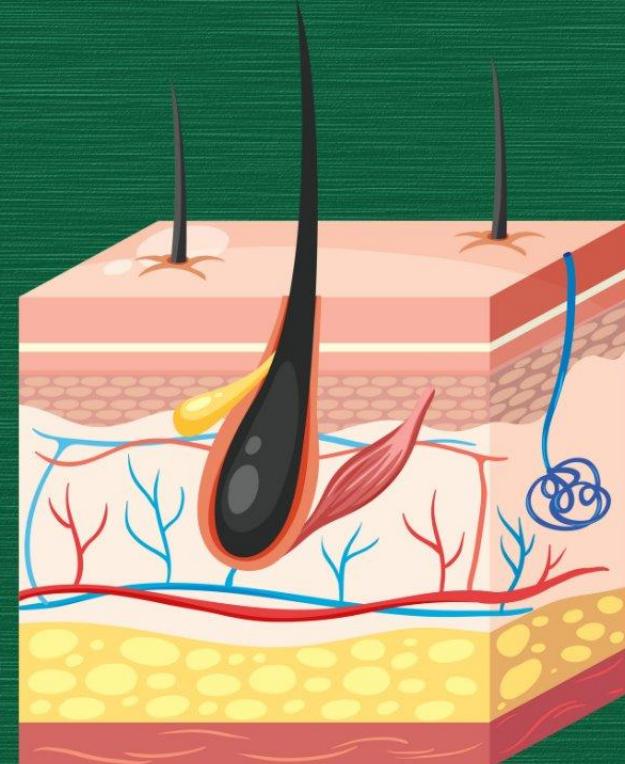


Government of India
Ministry of Science & Technology
Department of Biotechnology



ONE DAY ONE GENOME

Kocuria sp



PROTECTIVE
BARRIER OF THE
SKIN MICROBIOME

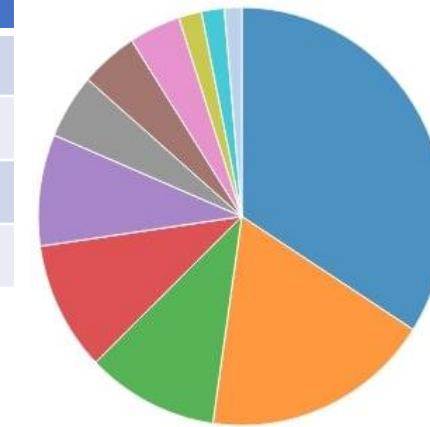
TOLERANCE TO
OXIDATIVE STRESS
ON THE SKIN
SURFACE

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	48
GC Content	68.98
Contig L50	5
Genome length	3,036,871 bp
Contig N50	239,505

Table 2: Annotated Genome Features

CDS	2,747
tRNA	48
Repeat Regions	0
rRNA	2

Subsystem Analysis

Subsystem (Subsystems, Genes)

METABOLISM	(75, 472)
PROTEIN PROCESSING	(40, 206)
ENERGY	(23, 159)
STRESS RESPONSE, DEFENSE, VIRULENCE	(22, 95)
DNA PROCESSING	(19, 87)
RNA PROCESSING	(11, 37)
CELLULAR PROCESSES	(10, 60)
MEMBRANE TRANSPORT	(9, 46)
REGULATION AND CELL SIGNALING	(4, 16)
CELL ENVELOPE	(4, 8)
MISCELLANEOUS	(3, 5)

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 target replacement protein	FabG, FabL-like, HtdX
Efflux pump conferring antibiotic resistance	CmlR family
Gene conferring resistance via absence	gidB
Protein altering cell wall charge conferring antibiotic resistance	GdpD, PgsA

Genome Assembly