

Strain		DSM 41984
Genus		<i>Streptomyces</i>
Species		<i>endophyticus</i>
Status		
Risk group		L1
Type strain		YIM 65594, CCTCC AA 209036, CCTCC AA 209036, YIM 65594
Genbank accession numbers		16S rRNA gene: GU367154 16S rRNA gene: DSM_41984
Reference		
Author		Li, J., Zhao, G. Z., Zhu, W. Y., Huang, H. Y., Xu, L. H., Zhang, S., Li, W. J.
Title		<i>Streptomyces endophyticus</i> sp. nov., an endophytic actinomycete isolated from <i>Artemisia annua</i> L
Journal		Int J Syst Evol Microbiol
Volume		63 (Pt1)
Page		224-9
Year		2013
Morphology		
Agar	ISP 2 - growth/G	Good
Agar	ISP 2 - colony colour/R	1001 Beige, 8024 Beige brown
Agar	ISP 2 - aerial mycelium/A	Sparse, 1013 Oyster white
Agar	ISP 2 - soluble pigment/S	None
Agar	ISP 3 - G	Good
Agar	ISP 3 - R	1001 Beige, 1015 Light ivory
Agar	ISP 3 - A	None
Agar	ISP 3 - S	None
Agar	ISP 4 - G	Good
Agar	ISP 4 - R	1001 Beige, 1015 Light ivory
Agar	ISP 4 - A	None
Agar	ISP 4 - S	None
Agar	ISP 5 - G	Good
Agar	ISP 5 - R	1015 Light ivory, 1011 Brown beige
Agar	ISP 5 - A	None
Agar	ISP 5 - S	None
Agar	ISP 6 - G	Good
Agar	ISP 6 - R	1002 Sand yellow
Agar	ISP 6 - A	None
Agar	ISP 6 - S	None
Agar	ISP 7 - G	Good
Agar	ISP 7 - R	1015 Light ivory, 1024 Ochre yellow
Agar	ISP 7 - A	Sparse, 9003 Signal white
Agar	ISP 7 - S	None

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Agar	suter with tyrosine - G	Good
Agar	suter with tyrosine - R	1001 Beige, 1015 Light ivory
Agar	suter with tyrosine - A	None
Agar	suter with tyrosine - S	1024 Ochre yellow
Agar	suter without tyrosine - G	Good
Agar	suter without tyrosine - R	1015 Light ivory, 1001 Beige
Agar	suter without tyrosine - A	None
Agar	suter without tyrosine - S	None
	Sporechains/Sporangia	
Physiology		
Melanin		1
pH	range	
pH	optimum	
temperature	range	
temperature	optimum	
sodium chloride tolerance		5%
lysozyme tolerance		
use of carbohydrates	glucose	+
use of carbohydrates	arabinose	+
use of carbohydrates	sucrose	+
use of carbohydrates	xylose	++
use of carbohydrates	inositol	+
use of carbohydrates	mannose	++
use of carbohydrates	fructose	++
use of carbohydrates	rhamnose	++
use of carbohydrates	raffinose	+
use of carbohydrates	cellulose	+
Api zym	Phosphatase alkaline	5
Api zym	Esterase (C4)	3
Api zym	Esterase Lipase (C8)	2
Api zym	Lipase (C14)	1
Api zym	Leucin arylamidase	5
Api zym	Valine arylamidase	2
Api zym	Cystine arylamidase	2
Api zym	Trypsin	0
Api zym	Chymotrypsin	0
Api zym	Phosphatase acid	5
Api zym	Naphtol-AS-BI-phosphohydrolase	4
Api zym	alpha galactosidase	0
Api zym	beta galactosidase	5
Api zym	beta glucuronidase	0
Api zym	alpha glucosidase	3
Api zym	beta glucosidase	4
Api zym	N-acetyl-beta-glucoseamidase	5

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Api zym	alpha mannosidase	0
Api zym	alpha fucosidase	0
Api coryne	nitrate reduction	+
Api coryne	Pyrazinamidase	-
Api coryne	Pyrrolidonyl arylamidase	+
Api coryne	Alkaline phosphatase	+
Api coryne	beta glucuronidase	-
Api coryne	beta galactosidase	+
Api coryne	alpha glucosidase	+
Api coryne	N-acetyl -beta glucoseamidase	+
Api coryne	Esculin (beta glucosidase)	-
Api coryne	Urease	+
Api coryne	Gelatine(hydrolysis)	+
Api coryne	Glucose fermentation	-
Api coryne	Ribose fermentation	-
Api coryne	Xylose fermentation	-
Api coryne	Mannitol fermentation	-
Api coryne	Maltose fermentation	-
Api coryne	Lactose fermentation	-
Api coryne	Sucrose fermentation	-
Api coryne	Glycogen fermentation	-
Metabolites		
Antimicrobial	Staphylococcus aureus	
Antimicrobial	Escherichia coli	
Antimicrobial	Micrococcus luteus	
Antimicrobial	Pseudomonas aeruginosa	
Antimicrobial	Streptomyces murinus	
Antimicrobial	Bacillus subtilis	
Antimicrobial	Candida albicans	
Antimicrobial	Saccharomyces cerevisiae	
Antimicrobial	Aspergillus niger	

APIcoryne



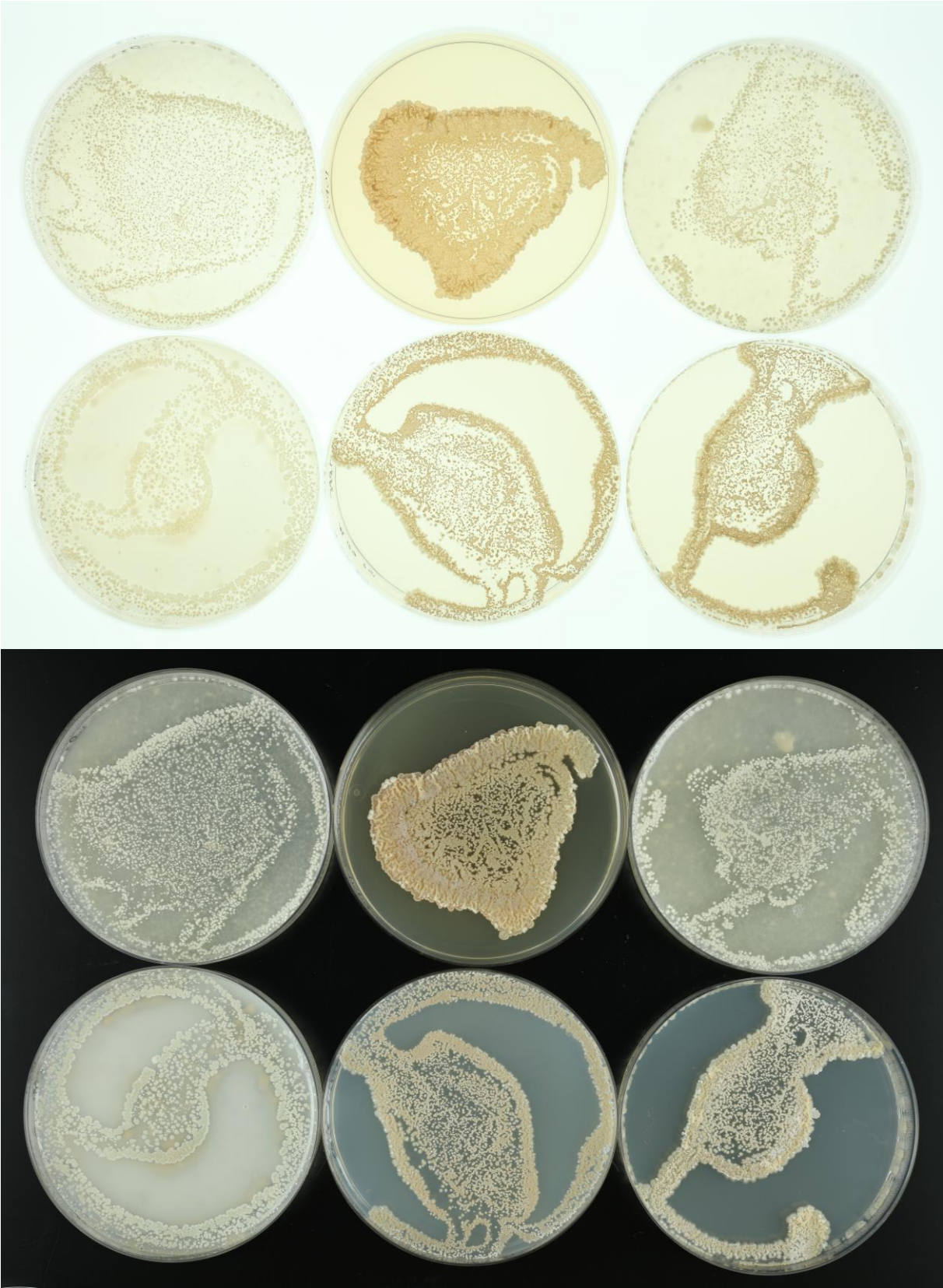
Abbildung 1: Apicoryne-Teststreifen mit Keim DSM.

APIzym

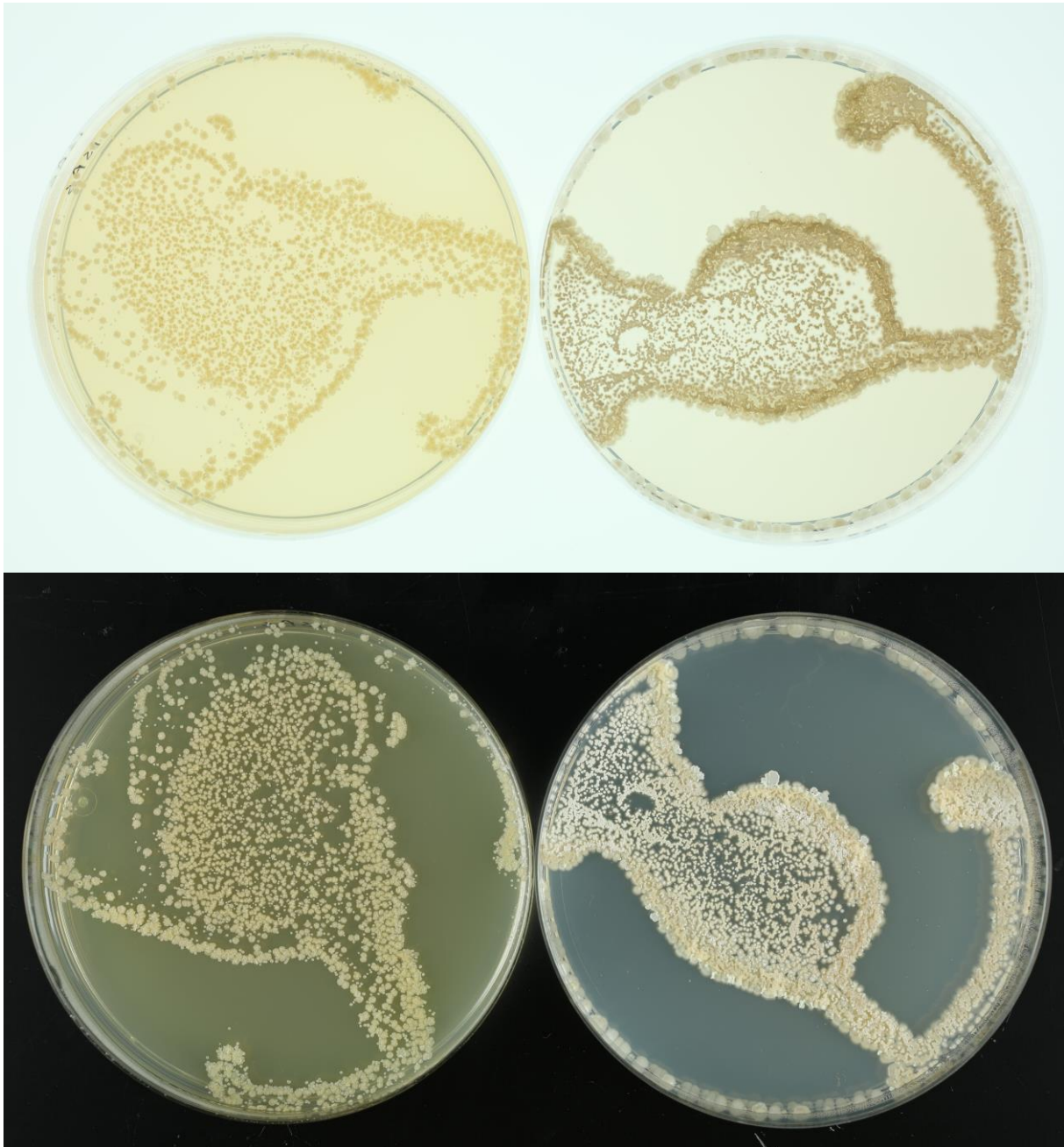


Abbildung 2: Apizym-Teststreifen mit Keim DSM.

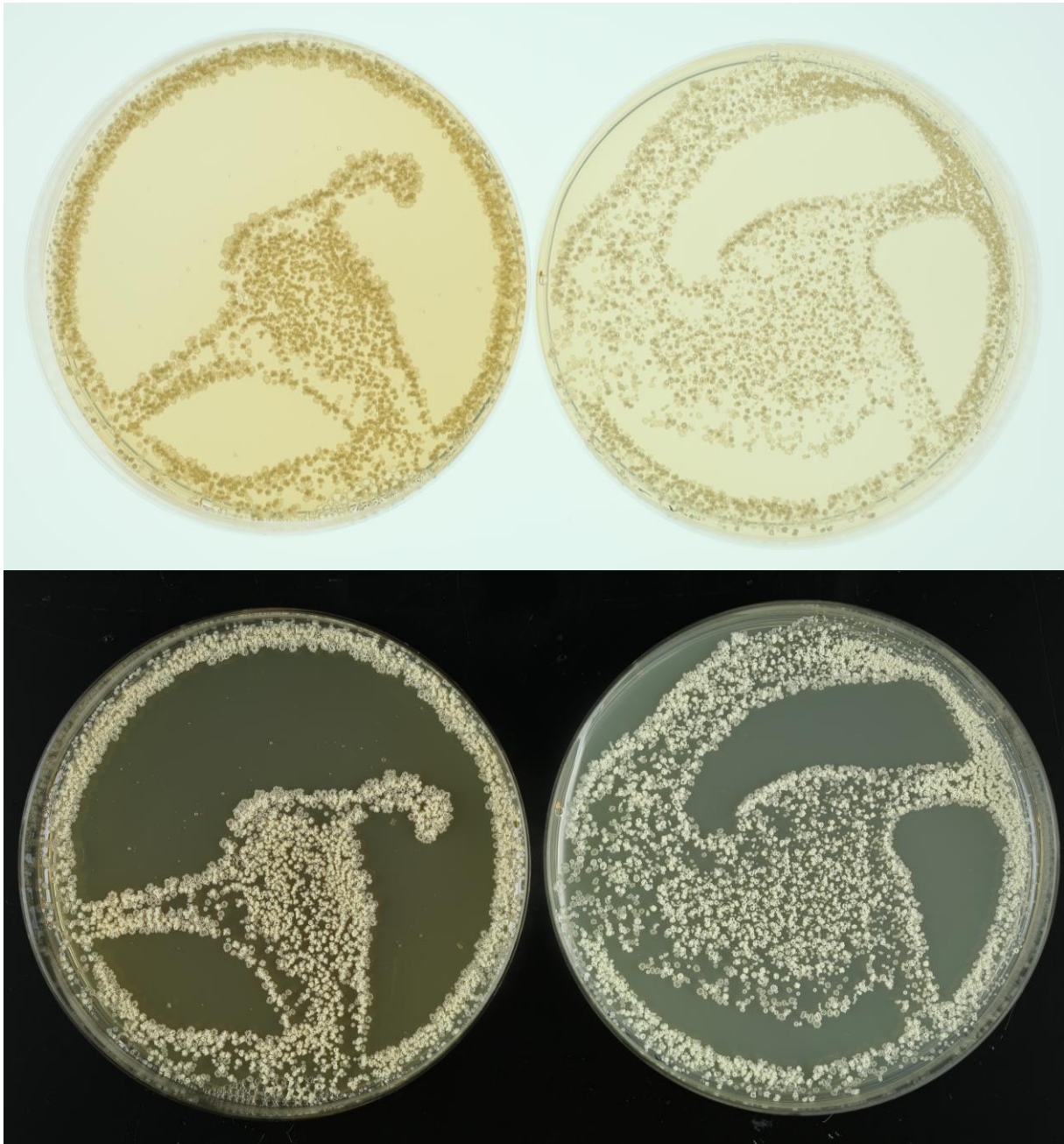
Plates (84, ISP2, ISP3, ISP4, ISP5, ISP7)



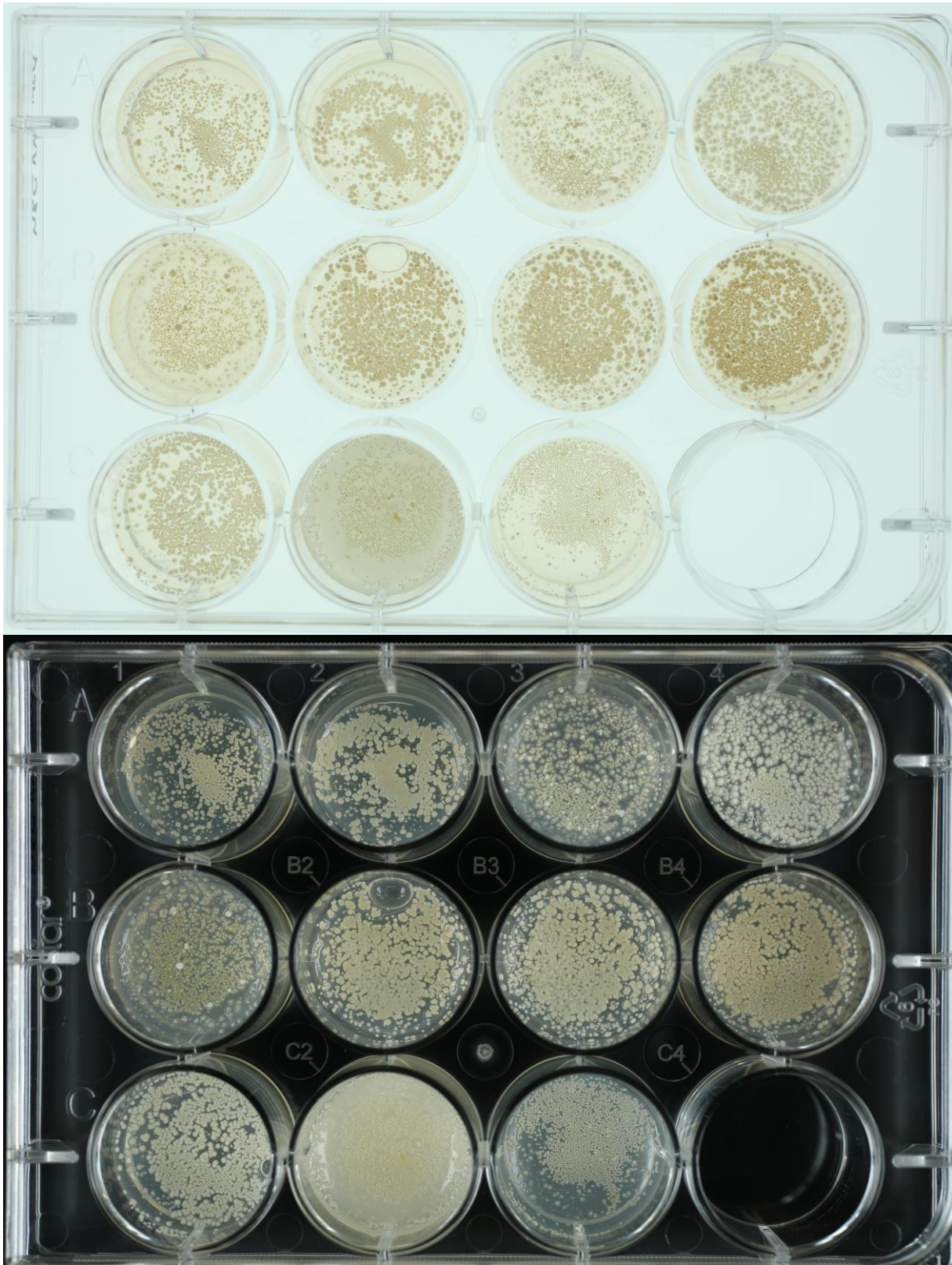
(ISP6, ISP7)



(SSM+T, SSM-T)



Carbon utilization test (from top left to bottom right: glucose, arabinose, sucrose, xylose, inositol, mannose, fructose, rhamnose, raffinose, cellulose)



Sodium chloride tolerance test (from top left to bottom right: 0%, 2,5%, 5%, 7,5%, 10%)

