

<b>Strain</b>		DSM 42121
Genus		<b><i>Streptomyces</i></b>
Species		<b><i>lushanensis</i></b>
<b>Status</b>		
Risk group		L1
Type strain		JXJ 0135, JCM 19682, KACC 17834, KCTC 29261
Genbank accession numbers		16S rRNA gene: <a href="#">KF938656</a>
<b>Reference</b>		
Author		Zhang, B. H., Cheng, J., Chen, W., Li, H. Q., Yang, J. Y., Park, D. J., Kim, C. J., Shen, R., Duan, Y. Q., Li, W. J.
Title		<i>Streptomyces lushanensis</i> sp. nov., a novel actinomycete with anti-cyanobacterial activity
Journal		J Antibiot (Tokyo)
Volume		68 (1)
Page		5-8
Year		2015
<b>Morphology</b>		
Agar	ISP 2 - growth/G	Good
Agar	ISP 2 - colony colour/R	1001 Beige, 1019 Grey beige
Agar	ISP 2 - aerial mycelium/A	Good, 9003 Signal white
Agar	ISP 2 - soluble pigment/S	1004 Daffodil yellow
Agar	ISP 3 - G	Good
Agar	ISP 3 - R	1002 Sand yellow, 8007 Fawn brown
Agar	ISP 3 - A	Good, 9016 Traffic white, 7034 Yellow grey, 7032 Pebble grey
Agar	ISP 3 - S	1011 Brown beige
Agar	ISP 4 - G	Good
Agar	ISP 4 - R	
Agar	ISP 4 - A	1001 Beige, 8007 Fawn brown
Agar	ISP 4 - S	Good, 7032 Pebble grey, 7034 Yellow grey, 9016 Traffic white
Agar	ISP 5 - G	Good
Agar	ISP 5 - R	1001 Beige, 8008 Olive brown
Agar	ISP 5 - A	Good, 9016 Traffic white, 7034 Yellow grey
Agar	ISP 5 - S	1014 Ivory
Agar	ISP 6 - G	Sparse
Agar	ISP 6 - R	1001 Beige
Agar	ISP 6 - A	None
Agar	ISP 6 - S	None

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Agar	ISP 7 - G	Good
Agar	ISP 7 - R	1001 Beige, 8007 Fawn brown
Agar	ISP 7 - A	Good, 9002 Grey white, 7034 Yellow grey
Agar	ISP 7 - S	1002 Sand yellow
Agar	suter with tyrosine - G	Sparse
Agar	suter with tyrosine - R	1002 Sand yellow, 1015 Light ivory
Agar	suter with tyrosine - A	Sparse, 9001 Cream
Agar	suter with tyrosine - S	1002 Sand yellow
Agar	suter without tyrosine - G	Sparse
Agar	suter without tyrosine - R	1001 Beige, 1019 Grey beige
Agar	suter without tyrosine - A	Sparse, 9001 Cream
Agar	suter without tyrosine - S	1002 Sand yellow
	Sporechains/Sporangia	
<b>Physiology</b>		
Melanin		-
pH	range	
pH	optimum	
temperature	range	
temperature	optimum	
sodium chloride tolerance		10%
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	4
Api zym	Esterase (C4)	2
Api zym	Esterase Lipase (C8)	2
Api zym	Lipase (C14)	1
Api zym	Leucin arylamidase	4
Api zym	Valine arylamidase	2
Api zym	Cystine arylamidase	2
Api zym	Trypsin	4
Api zym	Chymotrypsin	2
Api zym	Phosphatase acid	4
Api zym	Naphtol-AS-BI-phosphohydrolase	2
Api zym	alpha galactosidase	0
Api zym	beta galactosidase	0

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Api zym	beta glucuronidase	0
Api zym	alpha glucosidase	4
Api zym	beta glucosidase	5
Api zym	N-acetyl-beta-glucoseamidase	5
Api zym	alpha mannosidase	5
Api zym	alpha fucosidase	1
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	-
<b>Metabolites</b>		
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**

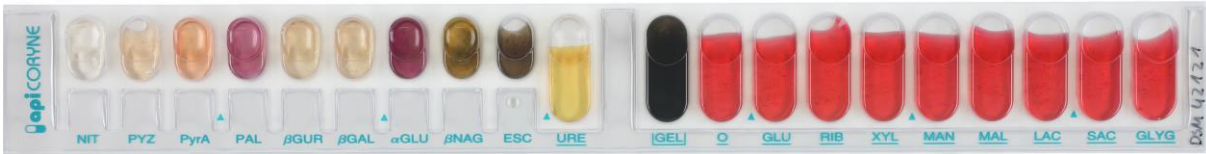


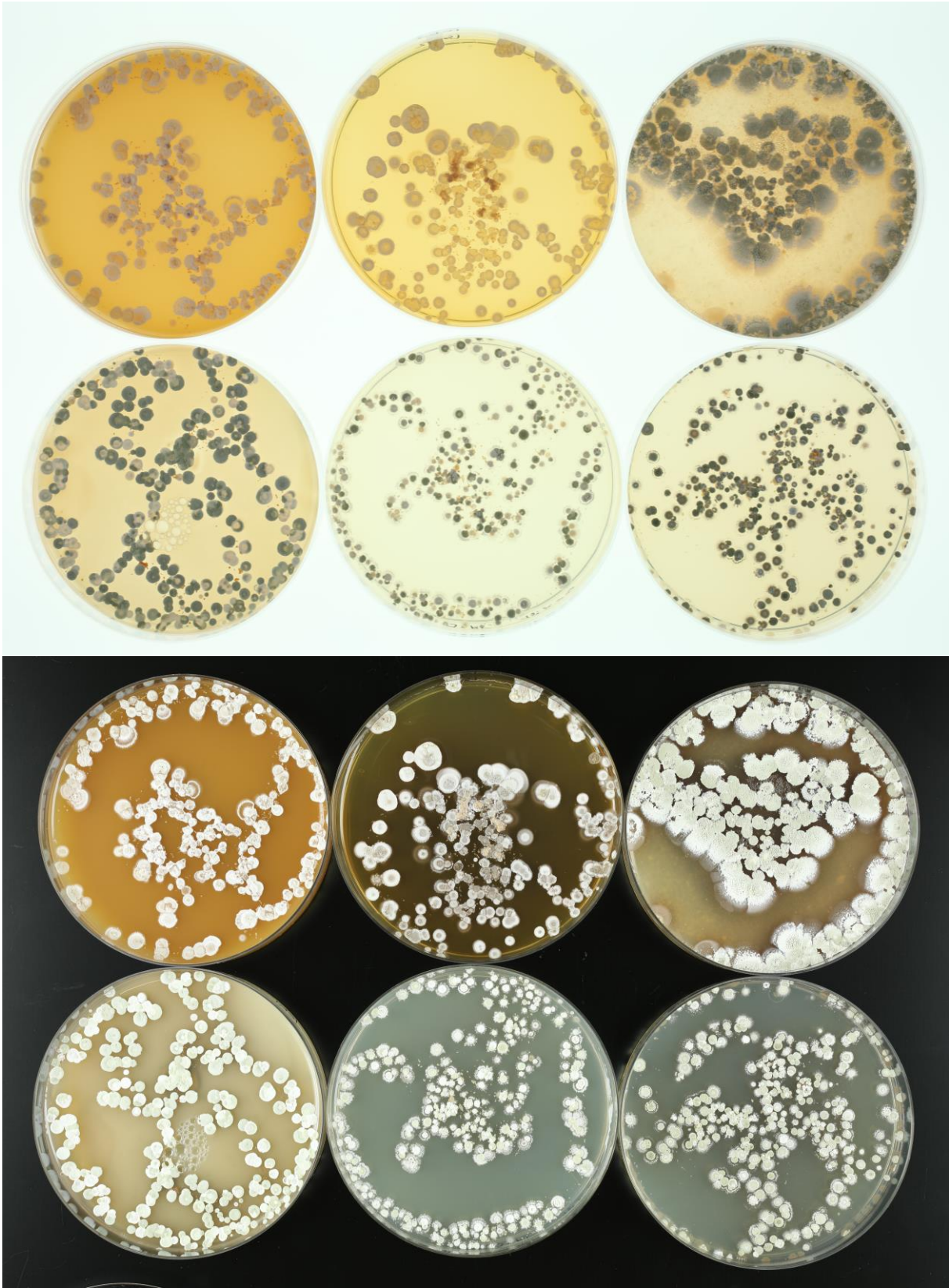
Abbildung 1: Apicoryne-Teststreifen mit Keim DSM.

**APIzym**

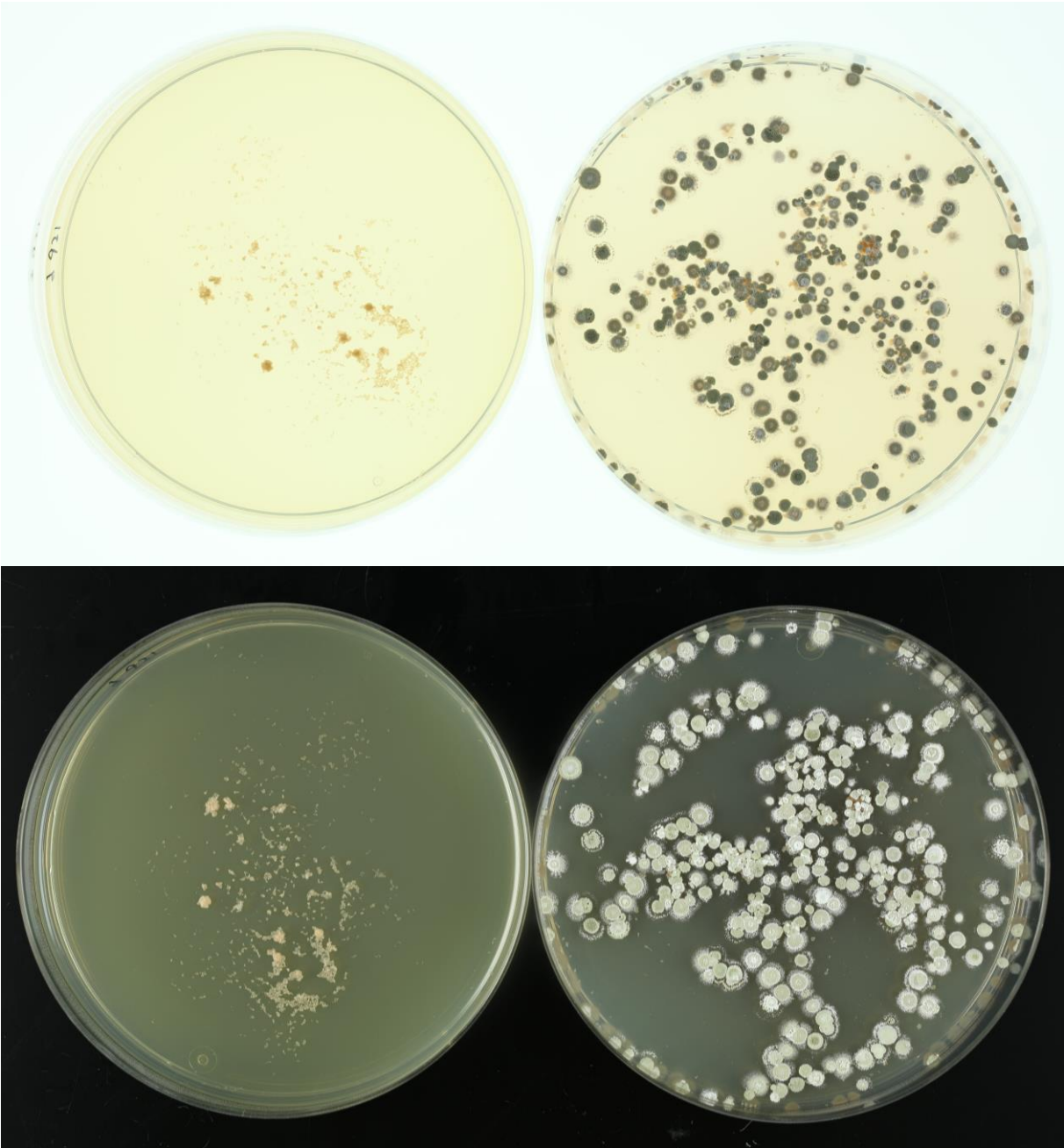


Abbildung 2: Apizym-Teststreifen mit Keim DSM.

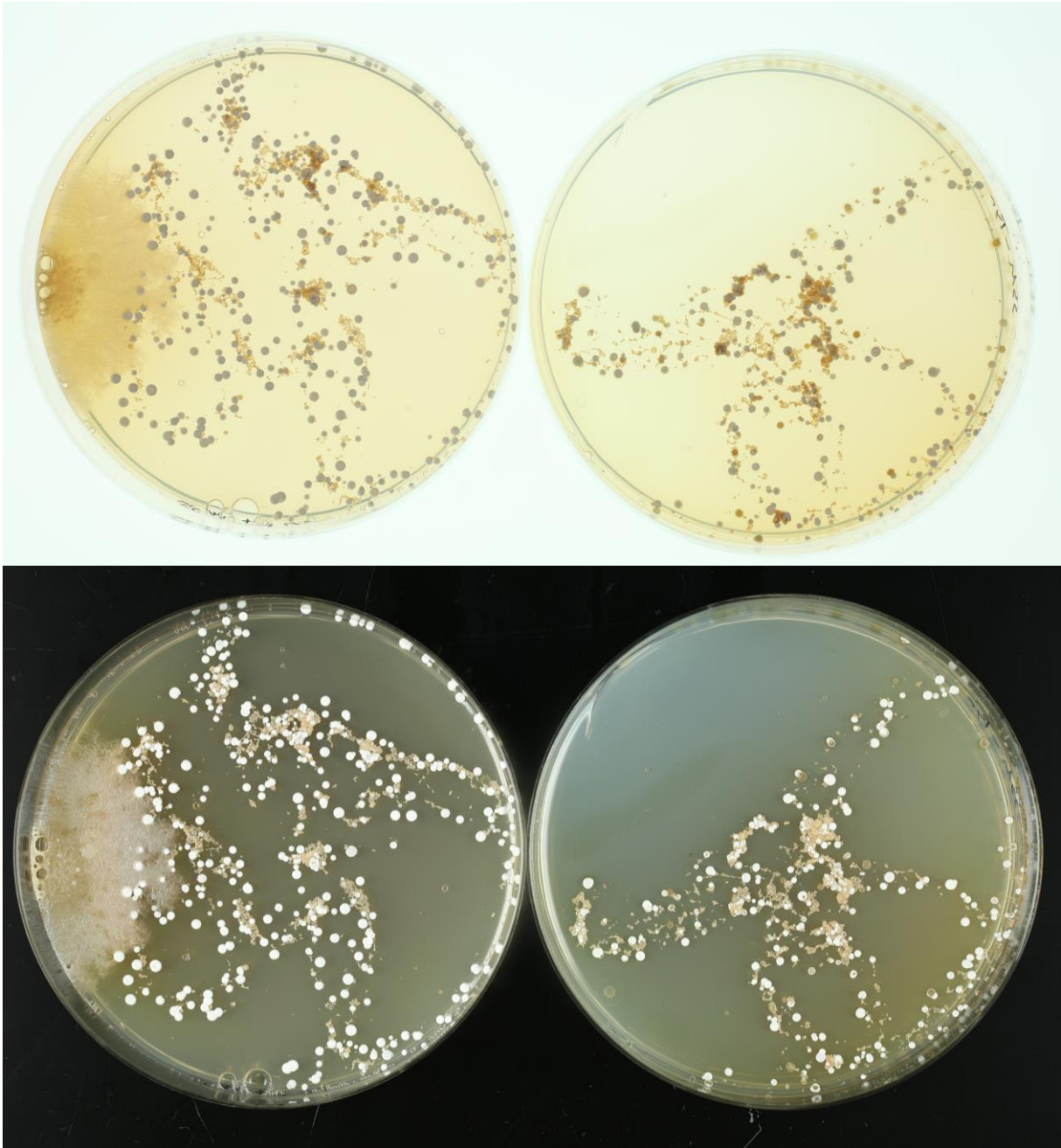
**Plates** (65, ISP2, ISP3, ISP4, ISP5, ISP7)



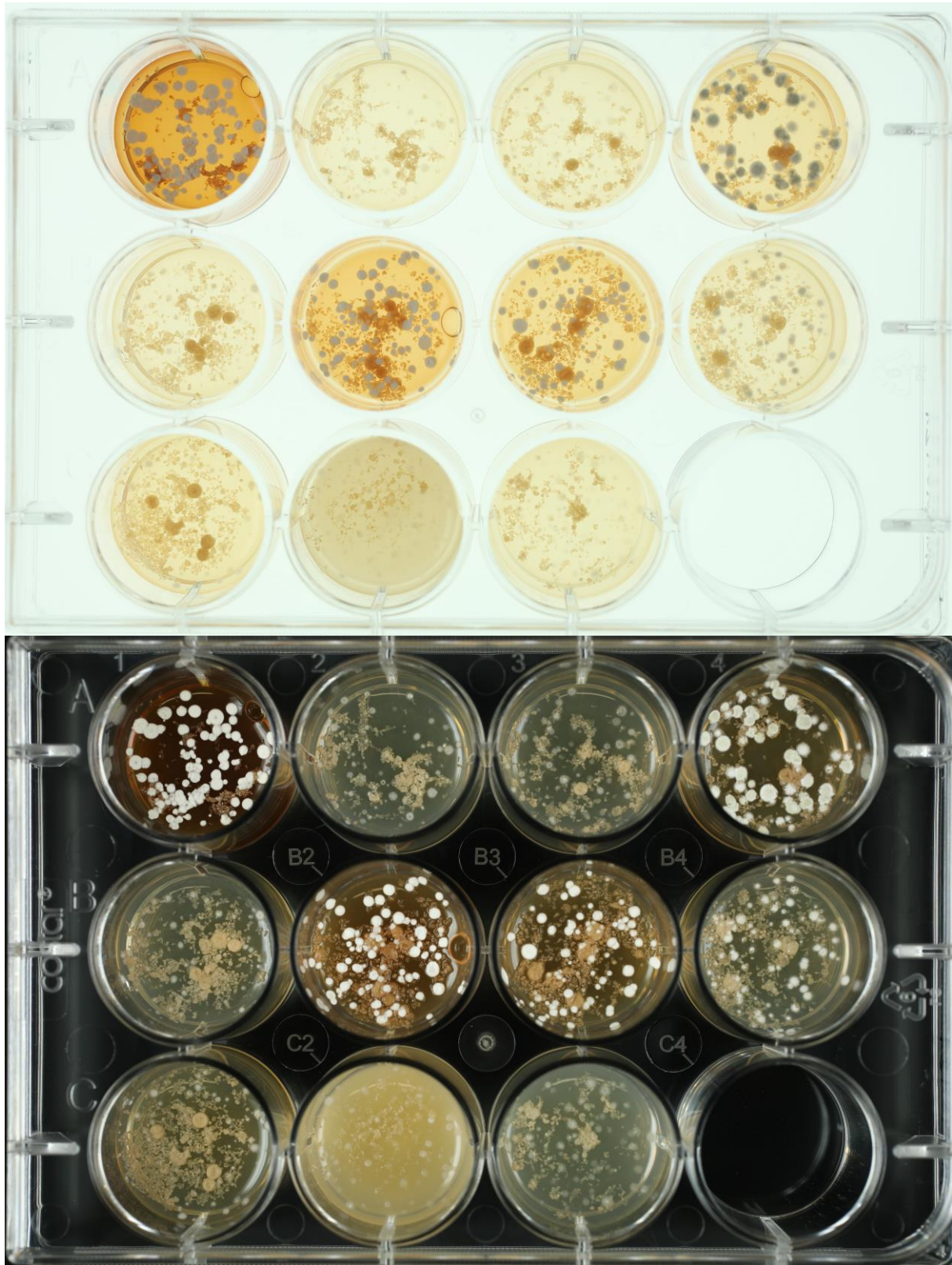
(ISP6, ISP7)



(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%)**

