

Strain		DSM 45647
Genus		<i>Micromonospora</i>
Species		<i>humi</i>
Status		
Risk group		L1
Type strain		P0402, JCM 15292, PCU 315, TISTR 1883
Genbank accession number		16S rRNA gene: GU459068
Reference		
Author		Songsumanus, A., Tanasupawat, S., Thawai, C., Suwanborirux, K., Kudo, T.
Title		Micromonospora humi sp. nov., isolated from peat swamp forest soil
Journal		Int J Syst Evol Microbiol
Volume		61 (Pt5)
Page		1176-1181
Year		2011
Morphology		
Agar	ISP 2 - growth/G	Good
Agar	ISP 2 - colony colour/R	8011 nut brown, 8008 olive brown
Agar	ISP 2 - aerial mycelium/A	None
Agar	ISP 2 - soluble pigment/S	None
Agar	ISP 3 - G	Good
Agar	ISP 3 - R	1033 dahlia yellow
Agar	ISP 3 - A	None
Agar	ISP 3 - S	None
Agar	ISP 4 - G	Sparse
Agar	ISP 4 - R	1013 oyster white, 2000 yellow orange
Agar	ISP 4 - A	None
Agar	ISP 4 - S	None
Agar	ISP 5 - G	Good
Agar	ISP 5 - R	1013 oyster white, 2000 yellow orange
Agar	ISP 5 - A	None
Agar	ISP 5 - S	None
Agar	ISP 6 - G	Good
Agar	ISP 6 - R	8001 ochre brown, 1007 daffodil yellow
Agar	ISP 6 - A	None
Agar	ISP 6 - S	None
Agar	ISP 7 - G	Sparse

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Agar	ISP 7 - R	1015 light ivory, 2000 yellow orange
Agar	ISP 7 - A	None
Agar	ISP 7 - S	None
Agar	suter with tyrosine - G	Good
Agar	suter with tyrosine - R	8001 ochre brown, 8007 fawn brown
Agar	suter with tyrosine - A	None
Agar	suter with tyrosine - S	None
Agar	suter without tyrosine - G	Good
Agar	suter without tyrosine - R	8001 ochre brown, 8007 fawn brown
Agar	suter without tyrosine - A	None
Agar	suter without tyrosine - S	None
	Sporechains/Sporangia	
Physiology		
Melanin		0
pH	range	
pH	optimum	
temperature	range	
temperature	optimum	
sodium chloride tolerance		2,5%
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	1
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	3
Api zym	Chymotrypsin	5
Api zym	Phosphatase acid	4
Api zym	Naphtol-AS-BI-phosphohydrolase	0
Api zym	alpha galactosidase	4

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Api zym	beta galactosidase	2
Api zym	beta glucuronidase	0
Api zym	alpha glucosidase	5
Api zym	beta glucosidase	3
Api zym	N-acetyl-beta-glucoseamidase	5
Api zym	alpha mannosidase	0
Api zym	alpha fucosidase	0
Api coryne	nitrate reduction	-
Api coryne	Pyraziamidase	-
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.

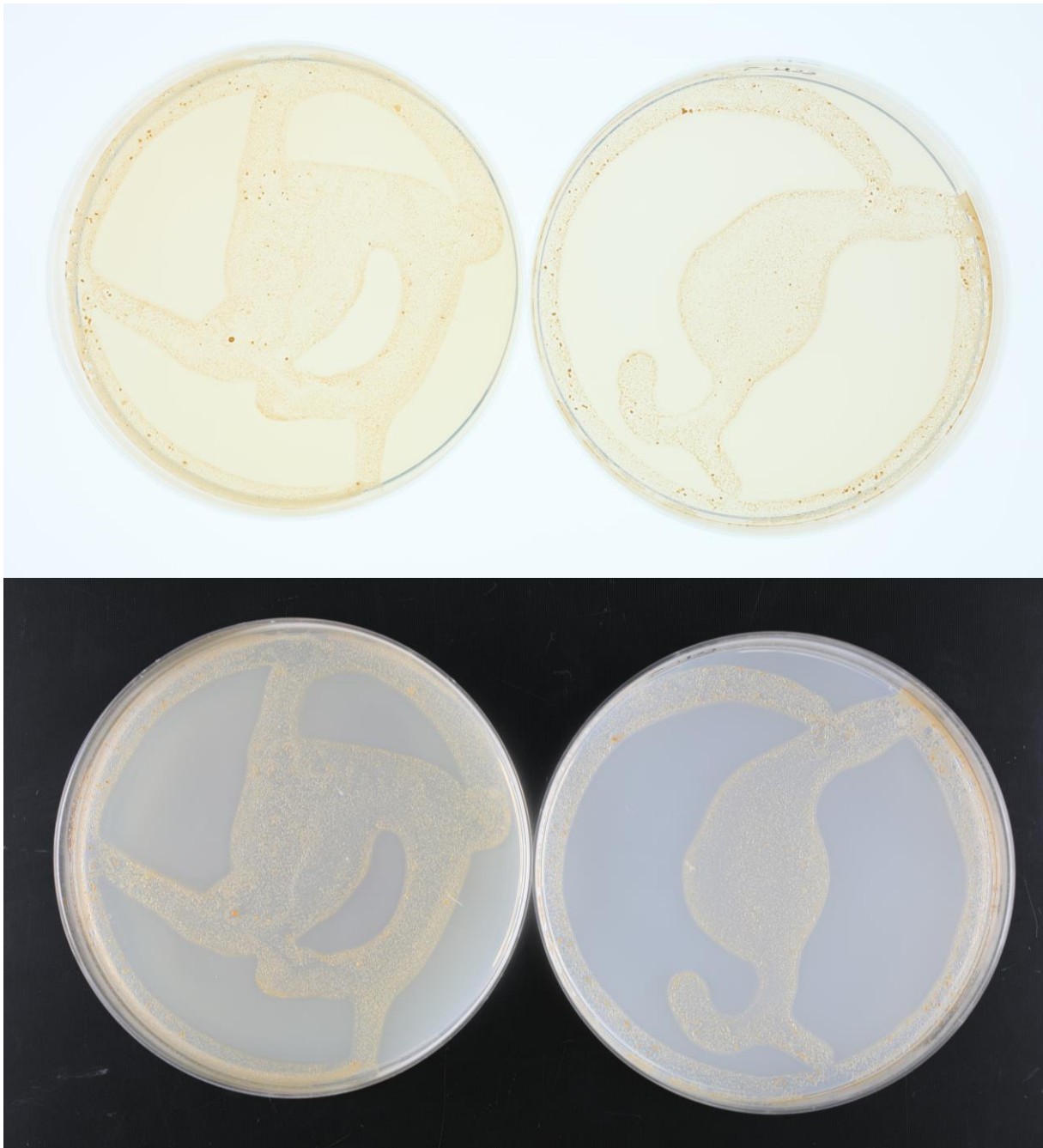
Plates (554, ISP2, ISP3, ISP4, ISP5, ISP7)



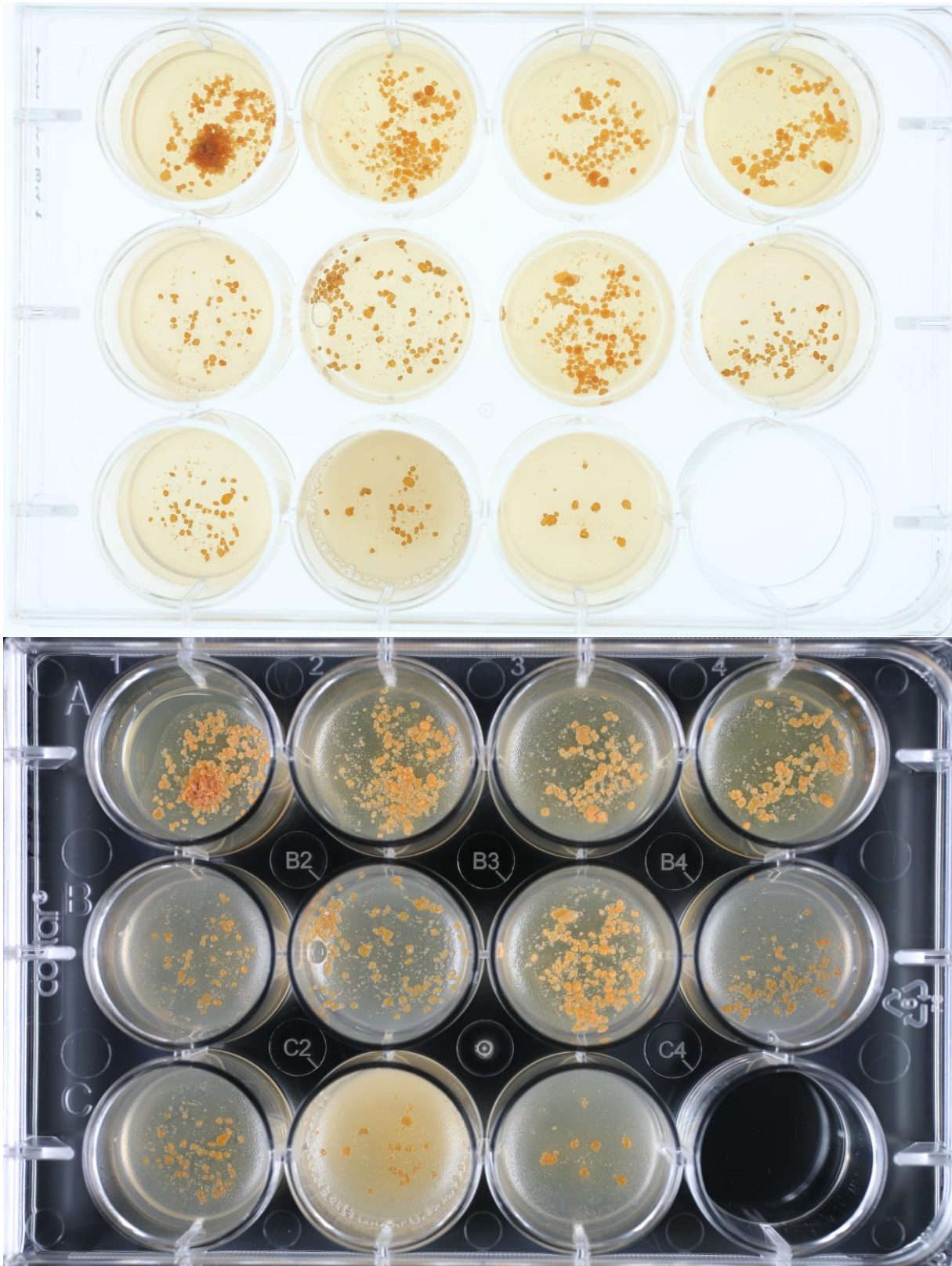
(ISP6, ISP7)



(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%)

