

Compendium of Actinobacteria from Dr. Joachim M. Wink
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Strain		DSM 42078
Genus		<i>Streptomyces</i>
Species		<i>viridis</i>
Status		
Risk group		L1
Type strain		BK199, CGMCC 4.6824, KACC 21003
Reference		
Author		Kim, B. Y., Rong, X., Zucchi, T. D., Huang, Y., Goodfellow, M.
Title		<i>Streptomyces chlorus</i> sp. nov. and <i>Streptomyces viridis</i> sp. nov., isolated from soil
Journal		Int J Syst Evol Microbiol
Volume		63 (Pt.5)
Page		1728-33
Year		2013
Author		Labeda, D. P., Rong, X., Huang, Y., Doroghazi, J. R., Ju, K.-S., Metcalf, W. W.
Title		Taxonomic evaluation of species in the <i>Streptomyces hirsutus</i> clade using multi-locus sequence analysis and proposals to reclassify several species in this clade
Journal		International Journal of Systematic and Evolutionary Microbiology
Volume		66 (6)
Page		2444-2450
Year		2016
Morphology		
Agar	ISP 2 - growth/G	good
Agar	ISP 2 - colony color/R	ivory (1014), lemon yellow (1012), honey yellow (1005)
Agar	ISP 2 - aerial mycelium/A	good
Agar	ISP 2 - soluble pigment/S	none
Agar	ISP 3 - G	good
Agar	ISP 3 - R	light ivory (1014), light ivory (1015), sand yellow (1002)
Agar	ISP 3 - A	cement grey (7033), good
Agar	ISP 3 - S	none
Agar	ISP 4 - G	sparse
Agar	ISP 4 - R	sand yellow (1002)
Agar	ISP 4 - A	signal white (9003), sparse
Agar	ISP 4 - S	none
Agar	ISP 5 - G	good
Agar	ISP 5 - R	ivory (1014), brown beige (1001)
Agar	ISP 5 - A	signal white (9003), good

Compendium of Actinobacteria from Dr. Joachim M. Wink
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Agar	ISP 5 - S	none
Agar	ISP 6 - G	good
Agar	ISP 6 - R	sand yellow (1002), golden yellow (1004)
Agar	ISP 6 - A	none
Agar	ISP 6 - S	none
Agar	ISP 7 - G	good
Agar	ISP 7 - R	sand yellow (1002), brown beige (1011), green brown (8000)
Agar	ISP 7 - A	signal white (9003), cement grey (7033), good
Agar	ISP 7 - S	none
Agar	suter with tyrosine - G	good
Agar	suter with tyrosine - R	sand yellow (1002), brown beige (1011), ivory (1014)
Agar	suter with tyrosine - A	signal white (9003), good
Agar	suter with tyrosine - S	none
Agar	suter without tyrosine - G	good
Agar	suter without tyrosine - R	sand yellow (1002), brown beige (1011), ivory (1014)
Agar	suter without tyrosine - A	signal white (9003), good
Agar	suter without tyrosine - S	none
	Sporechains/Sporangia	
Physiology		
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	4-5
Api zym	Esterase (C4)	2-3
Api zym	Esterase Lipase (C8)	2-3
Api zym	Lipase (C14)	0-1
Api zym	Leucin arylamidase	4

Compendium of Actinobacteria from Dr. Joachim M. Wink
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Api zym	Valine arylamidase	3
Api zym	Cystine arylamidase	1-2
Api zym	Trypsin	0
Api zym	Chymotrypsin	0
Api zym	Phosphatase acid	3-4
Api zym	Naphtol-AS-BI-phosphohydrolase	5
Api zym	alpha galactosidase	0
Api zym	beta galactosidase	1
Api zym	beta glucuronidase	0
Api zym	alpha glucosidase	2-3
Api zym	beta glucosidase	0
Api zym	N-acetyl-beta-glucoseamidase	0
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 42078.

Apizym



Abbildung 2: Apizym-Teststreifen mit Keim DSM 42078.

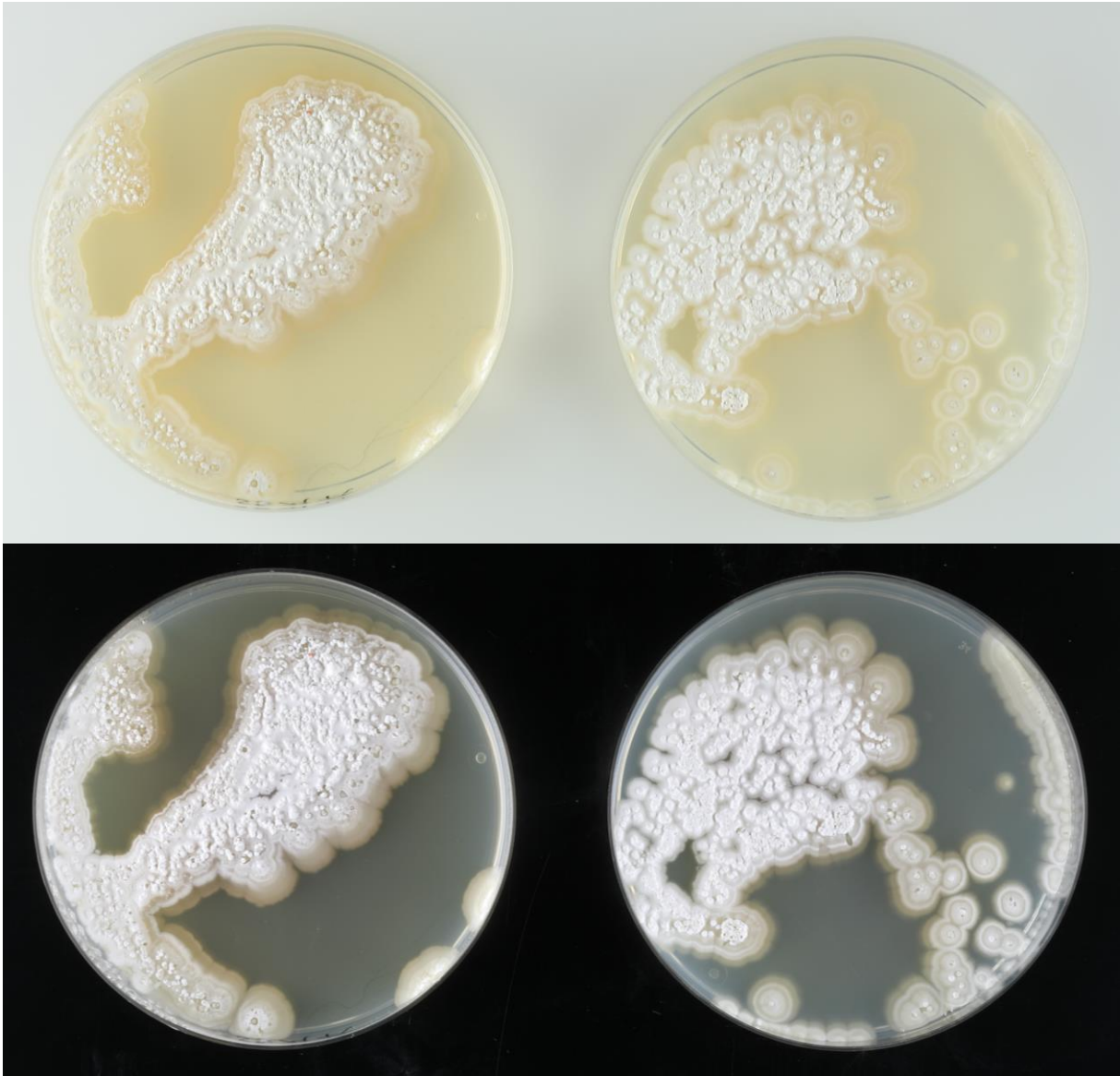
Plates (65, ISP2, ISP3, ISP4, ISP5, ISP7)



(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%)

