

Compendium of Actinobacteria from Dr. Joachim M. Wink
University of Braunschweig

Strain		DSM 44831
Genus		<i>Nocardia</i>
Species		<i>caishijiensis</i>
Status		
Risk group		L1 (classification according to German TRBA)
Type strain		AS 4.1728, F829, JCM 11508, DSM44831
Reference		
Author		Zhang, J., Liu, Z., Goodfellow, M.
Title		<i>Nocardia caishijiensis</i> sp. nov., a novel soil actinomycete
Journal		<i>Int.J.Syst.Evol.Microbiol.</i>
Volume		53
Page		999-1004
Year		2003
Morphology		
Agar	ISP 2 - growth/G	good
Agar	ISP 2 - colony color/R	beige red (3012)
Agar	ISP 2 - aerial mycelium/A	none
Agar	ISP 2 - soluble pigment/S	none
Agar	ISP 3 - G	sparse
Agar	ISP 3 - R	colourless
Agar	ISP 3 - A	none
Agar	ISP 3 - S	green beige (1000)
Agar	ISP 4 - G	sparse
Agar	ISP 4 - R	colourless
Agar	ISP 4 - A	none
Agar	ISP 4 - S	none
Agar	ISP 5 - G	good
Agar	ISP 5 - R	grey brown (8019)
Agar	ISP 5 - A	cream (9001)
Agar	ISP 5 - S	none
Agar	ISP 6 - G	good
Agar	ISP 6 - R	colourless
Agar	ISP 6 - A	none
Agar	ISP 6 - S	none
Agar	ISP 7 - G	good
Agar	ISP 7 - R	olive drab (6022)
Agar	ISP 7 - A	oyster white (1013)
Agar	ISP 7 - S	beige grey (7006)
Agar	suter with tyrosine - G	good
Agar	suter with tyrosine - R	olive drab (6022)
Agar	suter with tyrosine - A	pure white (9010)
Agar	suter with tyrosine - S	ochre yellow (1024)

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Agar	suter without tyrosine - G	good
Agar	suter without tyrosine - R	olive drab (6022)
Agar	suter without tyrosine - A	pure white (9010)
Agar	suter without tyrosine - S	none
	Sporechains/Sporangia	
Physiology		
Melanin		- (+) (+) -
pH	range	
pH	optimum	
temperature	range	
temperature	optimume	
sodim 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 alcaline	4
Api zym	Esterase (C4)	3
Api zym	Esterase Lipase (C8)	3
Api zym	Lipase (C14)	1
Api zym	Leucin arylamidase	2
Api zym	Valine arylamidase	2
Api zym	Cystine arylamidase	1
Api zym	Trypsin	1
Api zym	Chymotrypsin	1
Api zym	Phosphatase acid	4
Api zym	Naphtol-AS-BI-phosphohydrolase	3
Api zym	alpha galactosidase	0
Api zym	beta galactosidase	0
Api zym	beta glucuronidase	0
Api zym	alpha glucosidase	5
Api zym	beta GLUCOSIDASE	1
Api zym	N-acetyl-beta-glucoseamidase	0
Api zym	alpha mannosidase	0
Api zym	alpha fucosidase	1
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



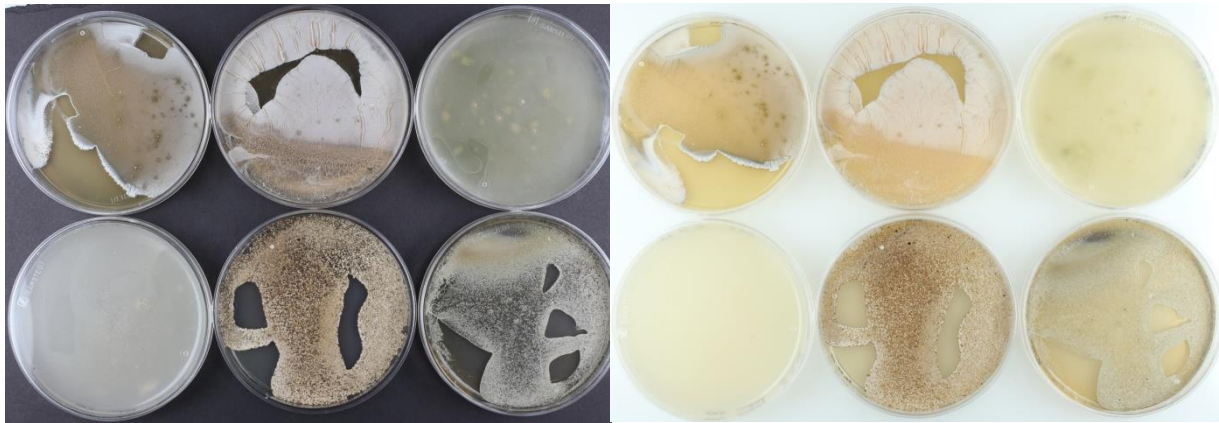
Abbildung 1: Apicoryne-Teststreifen mit Keim DSM 44831.

Apizym

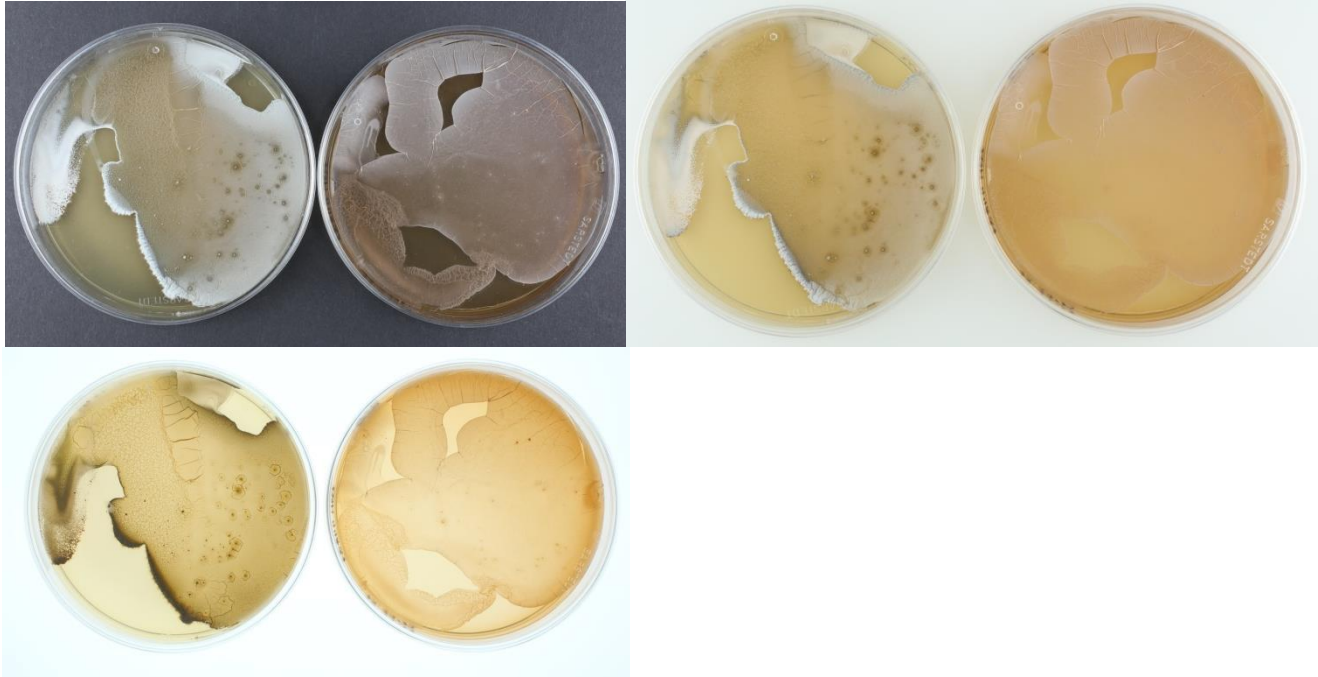


Abbildung 2: Apizym-Teststreifen mit Keim DSM 44831.

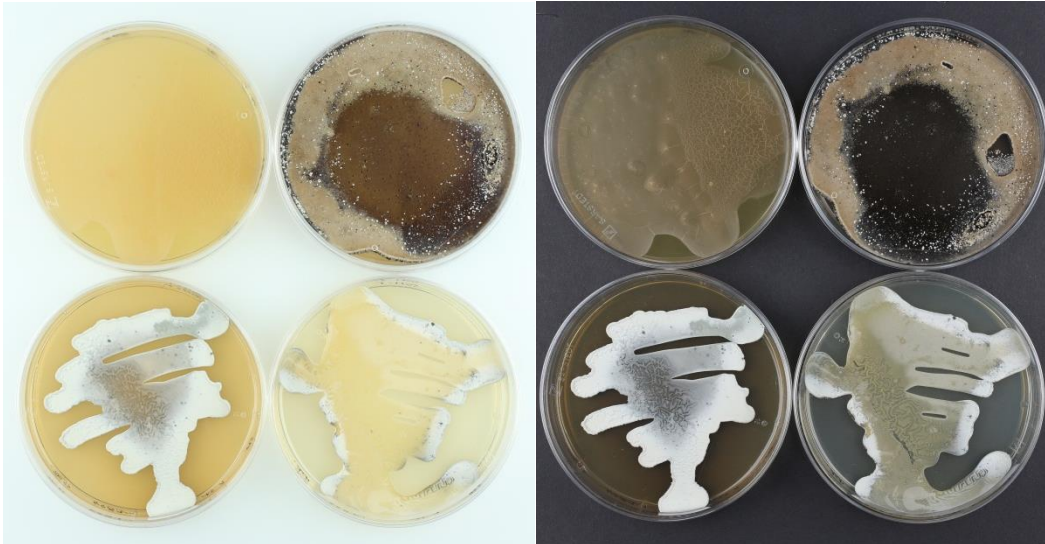
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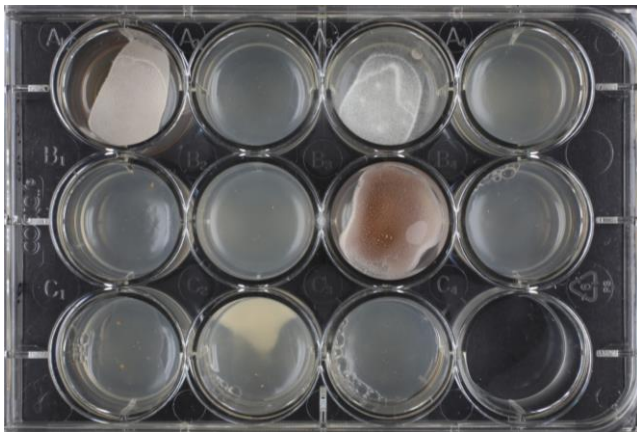
Plates (65, ISP2, ISP3, ISP4, ISP5, ISP7)



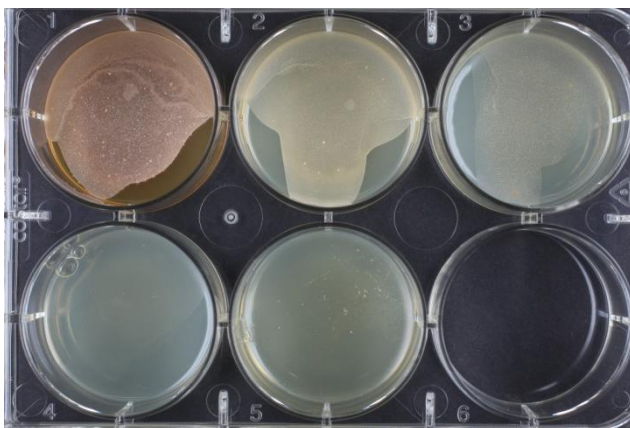
(65, 5006)



(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%)