

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

Strain		DSM 46744
Genus		<i>Actinomadura</i>
Species		<i>algeriensis</i>
Status		
Risk group		1 (provisional classification by DSMZ)
Type strain		CECT 8841, ACD1
Genbank accession numbers		16S rRNA gene: KT259320
Reference		
Author		Lahoum, A., Bouras, N., Mathieu, F., Schumann, P., Spröer, C., Klenk, H. P., Sabaou, N.
Title		<i>Actinomadura algeriensis</i> sp. nov., an actinobacterium isolated from Saharan soil
Journal		<i>Antonie Van Leeuwenhoek</i>
Volume		109 (1)
Page		159-65
Year		2016
Author		Oren, A., Garrity, G. M.
Title		List of new names and new combinations previously effectively, but not validly, published
Journal		<i>Int J Syst Evol Microbiol</i>
Volume		67 (5)
Page		1095-1098
Year		2017
Morphology		
Agar	ISP 2 - growth/G	good
Agar	ISP 2 - colony color/R	black red (3007)
Agar	ISP 2 - aerial mycelium/A	none
Agar	ISP 2 - soluble pigment/S	purple red (3004)
Agar	ISP 3 - G	sparse
Agar	ISP 3 - R	wine red (3005)
Agar	ISP 3 - A	traffic white (9016), agate grey (7038), sparse
Agar	ISP 3 - S	antique pink (3014)
Agar	ISP 4 - G	sparse
Agar	ISP 4 - R	ruby red (3003)
Agar	ISP 4 - A	pure white (9010)
Agar	ISP 4 - S	antique pink (3014)
Agar	ISP 5 - G	sparse- good
Agar	ISP 5 - R	purple red (3004), strawberry red (3018)
Agar	ISP 5 - A	platinum grey (7036), traffic white

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		(9016)
Agar	ISP 5 - S	antique pink (3014)
Agar	ISP 6 - G	good
Agar	ISP 6 - R	pastel violet (4009)
Agar	ISP 6 - A	none
Agar	ISP 6 - S	ruby red (3003)
Agar	ISP 7 - G	sparse
Agar	ISP 7 - R	brown red (3011)
Agar	ISP 7 - A	traffic white (9016), sparse
Agar	ISP 7 - S	beige red (3012)
Agar	suter with tyrosine - G	sparse- good
Agar	suter with tyrosine - R	purple red (3004), salmon pink (3022)
Agar	suter with tyrosine - A	none
Agar	suter with tyrosine - S	beige red (3012)
Agar	suter without tyrosine - G	sparse- good
Agar	suter without tyrosine - R	purple red (3004), beige (1001)
Agar	suter without tyrosine - A	none
Agar	suter without tyrosine - S	beige red (3012)
	Sporechains/Sporangia	
Physiology		
Melanin		-
pH	range	
pH	optimum	
temperature	range	
temperature	optimum	
sodium chloride tolerance		2,5 % (aerial mycelium at 0 %)
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	5
Api zym	Esterase (C4)	1
Api zym	Esterase Lipase (C8)	3
Api zym	Lipase (C14)	0
Api zym	Leucin arylamidase	5
Api zym	Valine arylamidase	3
Api zym	Cystine arylamidase	1

Api zym	Trypsin	1
Api zym	Chymotrypsin	5
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	1
Api zym	beta glucosidase	3
Api zym	N-acetyl-beta-glucosaminidase	0
Api zym	alpha mannosidase	1
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 glucosaminidase	-
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	-

Apicoryne



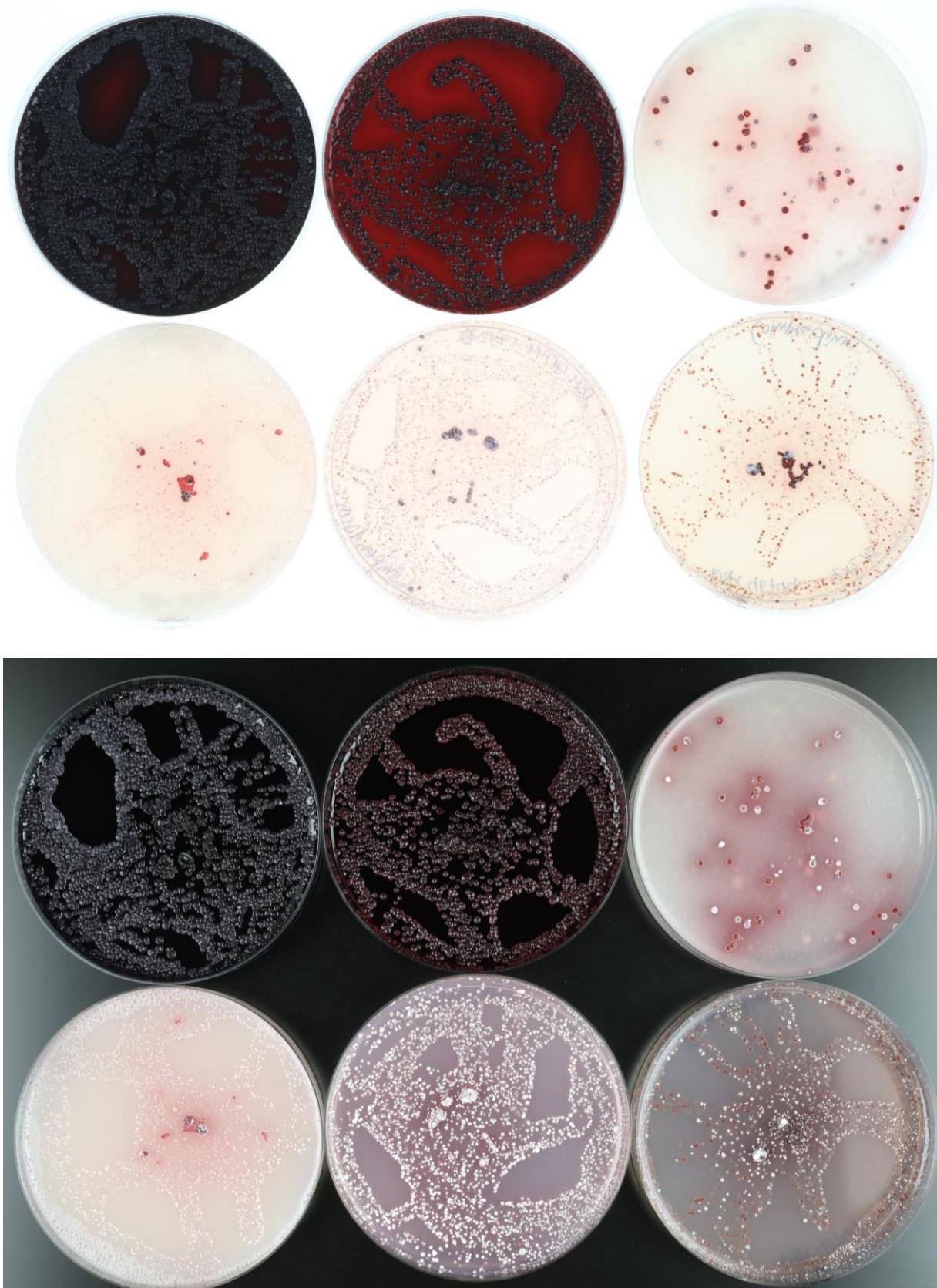
Abbildung 1: Apicoryne-Teststreifen mit Keim DSM 46744.

Apizym



Abbildung 2: Apizym-Teststreifen mit Keim DSM 46744.

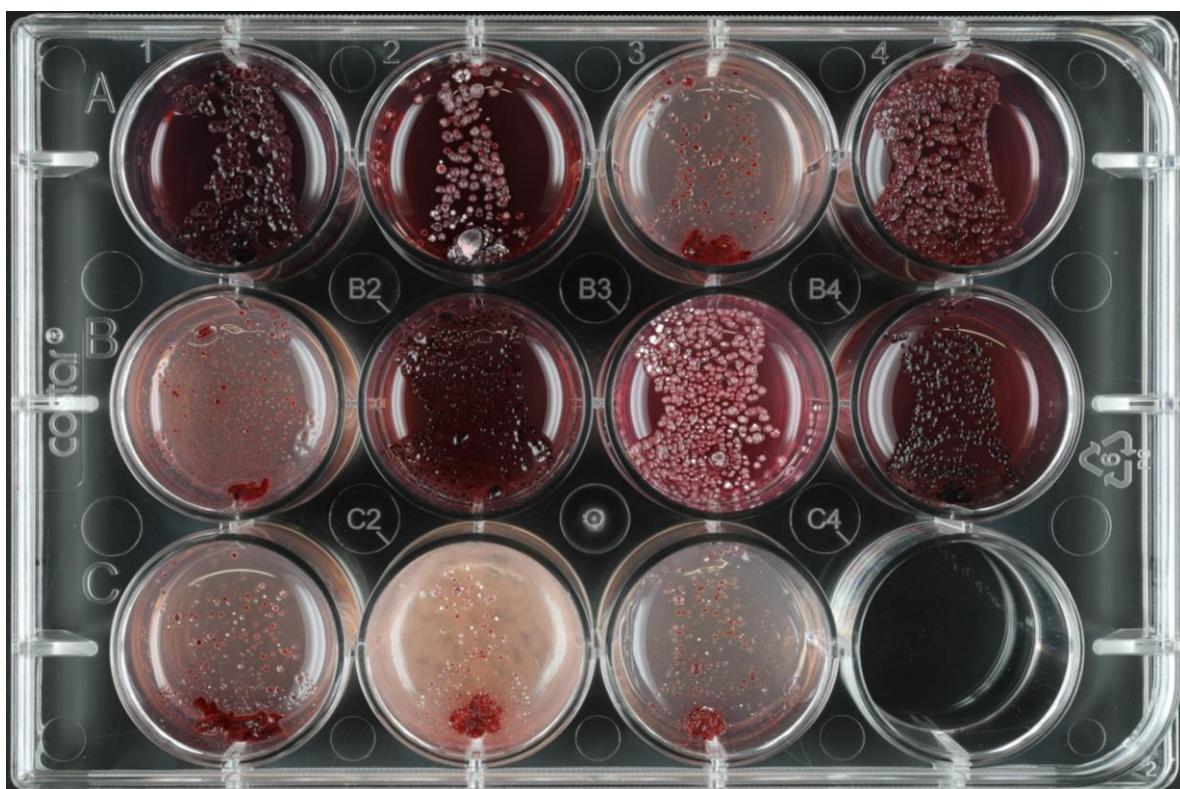
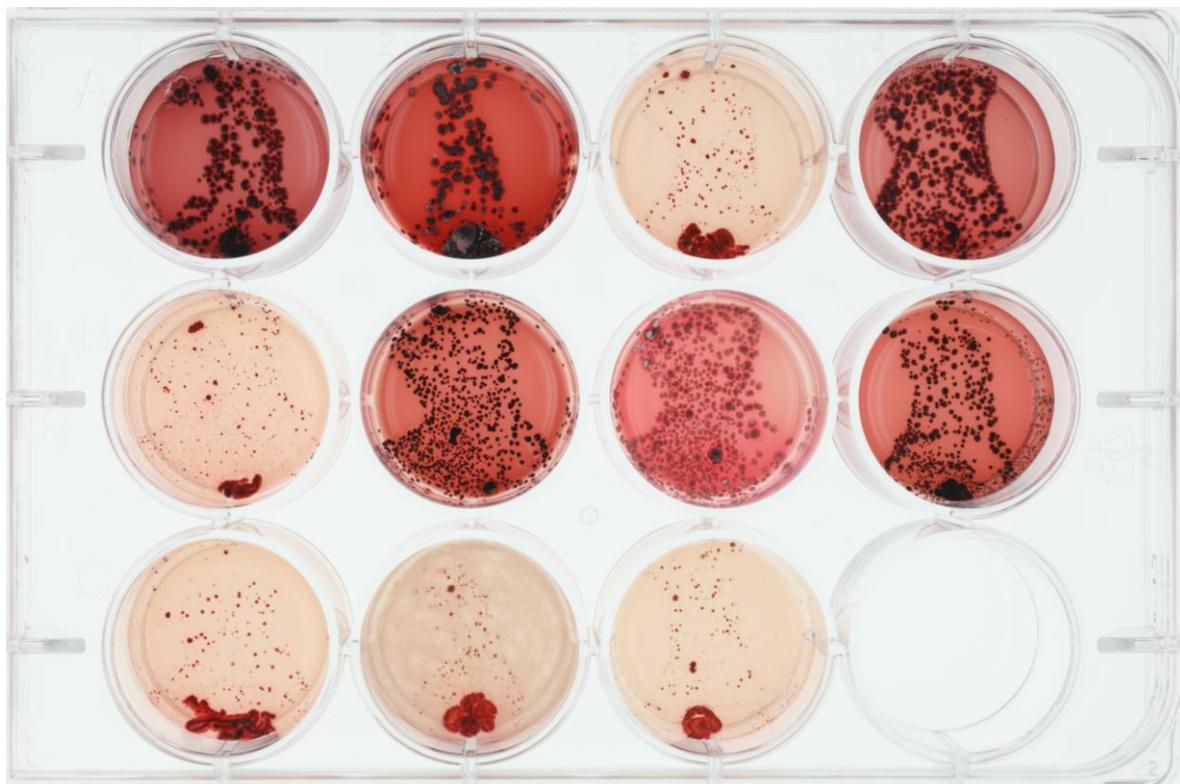
Plates (553, ISP2, ISP3, ISP4, ISP5, ISP7)



(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%)**

