

Compendium of Actinobacteria from Dr. Joachim M. Wink
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Strain		DSM 46659
Genus		<i>Nocardiopsis</i>
Species		<i>mwathae</i>
Status		
Risk group		1 (provisional classification by DSMZ)
Type strain		No.156, CECT 8552
Genbank accession numbers		16S rRNA gene: KF976731
Reference		
Author		Akhwale, J. K., Göker, M., Rohde, M., Schumann, P., Boga, H. I., Klenk, H. P.
Title		<i>Nocardiopsis mwathae</i> sp. nov., isolated from the haloalkaline Lake Elmenteita in the African Rift Valley
Journal		<i>Antonie Van Leeuwenhoek</i>
Volume		109 (3)
Page		421-30
Year		2016
Author		Oren, A., Garrity, G. M.
Title		List of new names and new combinations previously effectively, but not validly, published
Journal		<i>International Journal of Systematic and Evolutionary Microbiology</i>
Volume		66 (7)
Page		2463-2466
Year		2016
Morphology		
Agar	ISP 2 - growth/G	good
Agar	ISP 2 - colony color/R	lemon yellow (1012)
Agar	ISP 2 - aerial mycelium/A	light ivory (1015)
Agar	ISP 2 - soluble pigment/S	none
Agar	ISP 3 - G	good
Agar	ISP 3 - R	zinc yellow (1018)
Agar	ISP 3 - A	none
Agar	ISP 3 - S	none
Agar	ISP 4 - G	good
Agar	ISP 4 - R	ivory (1014) ?
Agar	ISP 4 - A	oyster white (1013)
Agar	ISP 4 - S	none
Agar	ISP 5 - G	good
Agar	ISP 5 - R	sulfur yellow (1016)
Agar	ISP 5 - A	none

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Agar	ISP 5 - S	none
Agar	ISP 6 - G	good
Agar	ISP 6 - R	honey yellow (1005)
Agar	ISP 6 - A	ivory (1014)
Agar	ISP 6 - S	none
Agar	ISP 7 - G	sparse
Agar	ISP 7 - R	lemon yellow (1012)
Agar	ISP 7 - A	none
Agar	ISP 7 - S	none
Agar	suter with tyrosine - G	sparse
Agar	suter with tyrosine - R	zinc yellow (1018)
Agar	suter with tyrosine - A	none
Agar	suter with tyrosine - S	none
Agar	suter without tyrosine - G	sparse
Agar	suter without tyrosine - R	zinc yellow (1018)
Agar	suter without tyrosine - A	none
Agar	suter without tyrosine - S	none
	Sporechains/Sporangia	
Physiology		
Melanin		-
pH	range	
pH	optimum	
temperature	range	
temperature	optimum	
sodium chloride tolerance		7,5% (aerial mycelium up to 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	(+) (aerial mycelium)
use of carbohydrates	rhamnose	-
use of carbohydrates	raffinose	-
use of carbohydrates	cellulose	-
Api zym	Phosphatase alkaline	5
Api zym	Esterase (C4)	2
Api zym	Esterase Lipase (C8)	1
Api zym	Lipase (C14)	0
Api zym	Leucin arylamidase	5
Api zym	Valine arylamidase	5
Api zym	Cystine arylamidase	2
Api zym	Trypsin	2

Api zym	Chymotrypsin	5
Api zym	Phosphatase acid	5
Api zym	Naphtol-AS-BI-phosphohydrolase	5
Api zym	alpha galactosidase	0
Api zym	beta galactosidase	0
Api zym	beta glucuronidase	0
Api zym	alpha glucosidase	5
Api zym	beta glucosidase	0
Api zym	N-acetyl-beta-glucoseamidase	5
Api zym	alpha mannosidase	3
Api zym	alpha fucosidase	0
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	-

Apicoryne



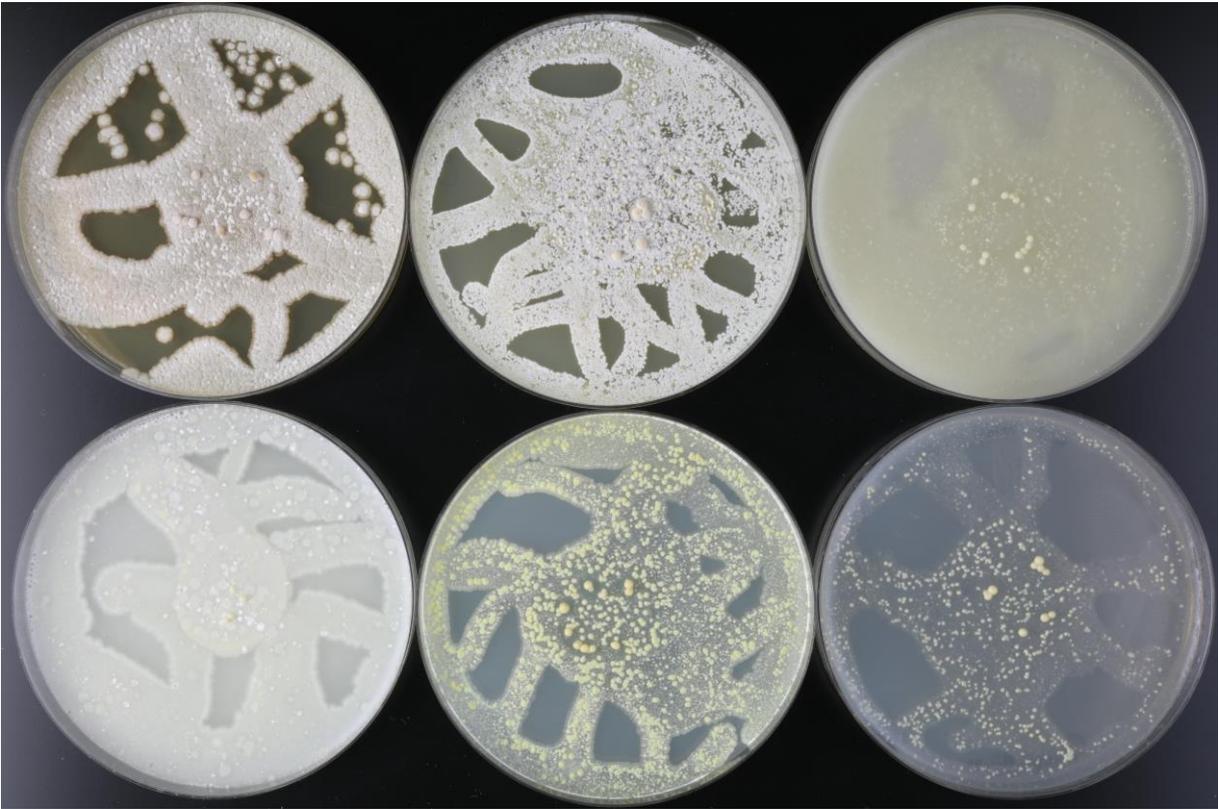
Abbildung 1: Apicoryne-Teststreifen mit Keim DSM 46659.

Apizym

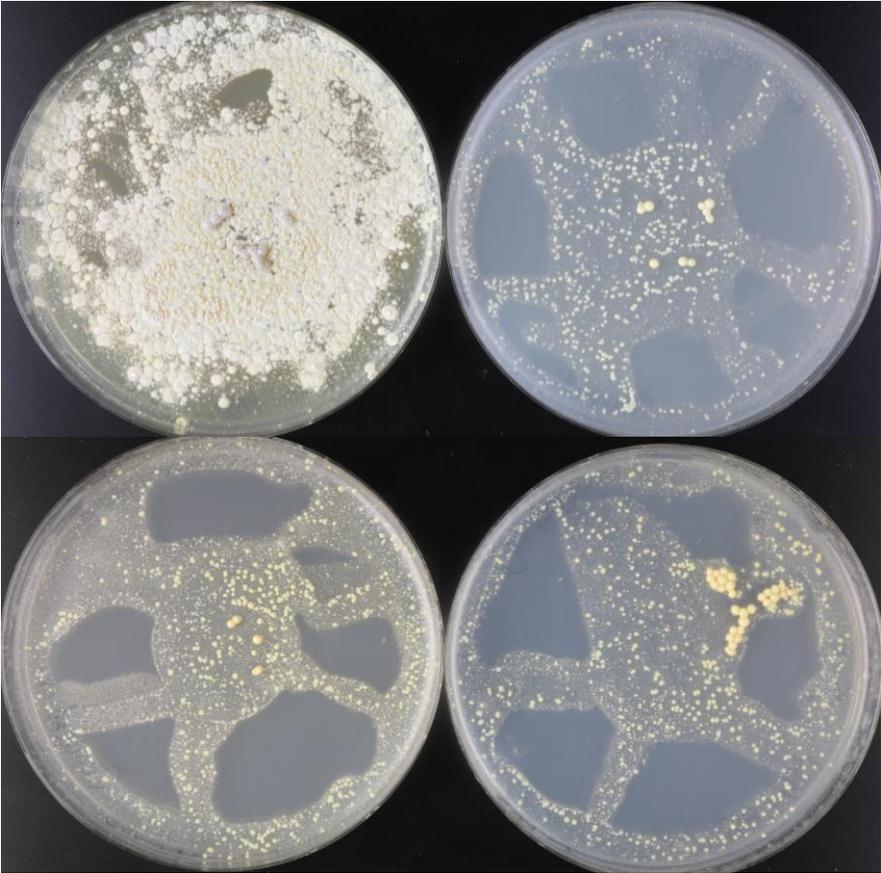
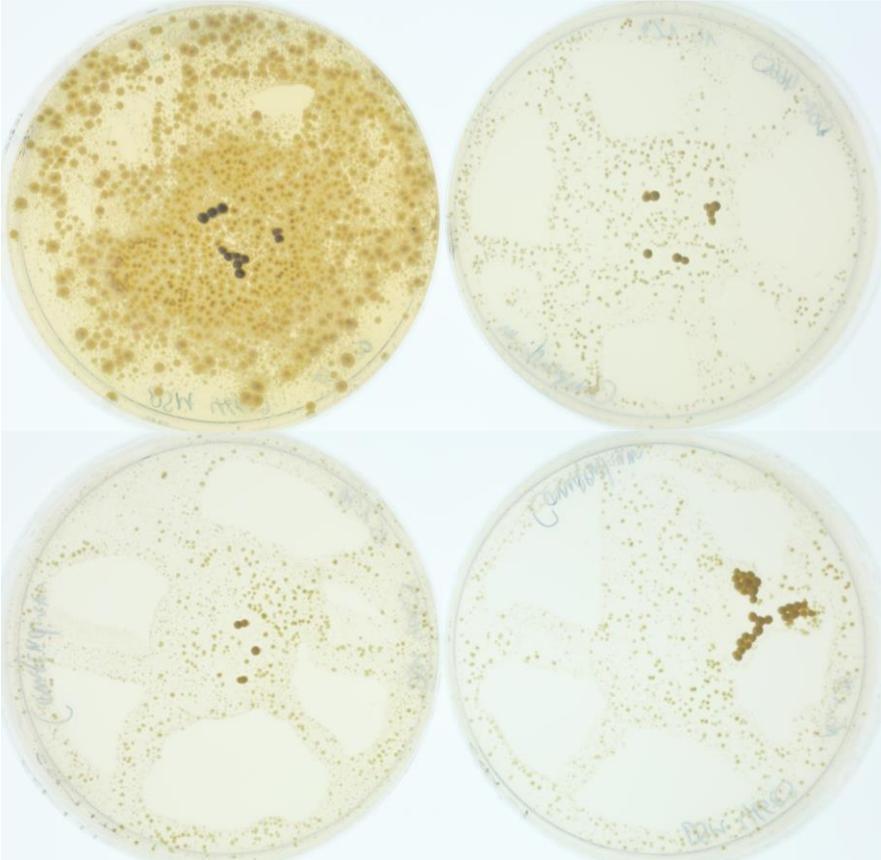


Abbildung 2: Apizym-Teststreifen mit Keim DSM 46659.

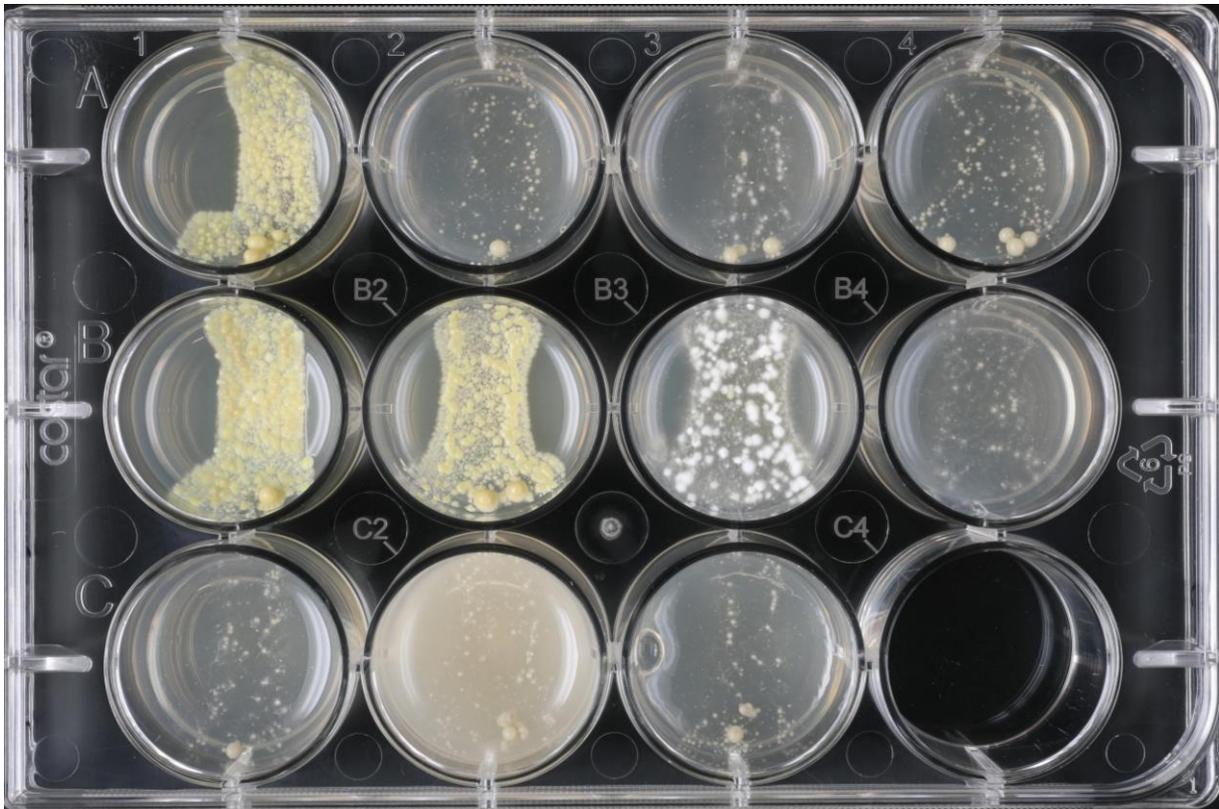
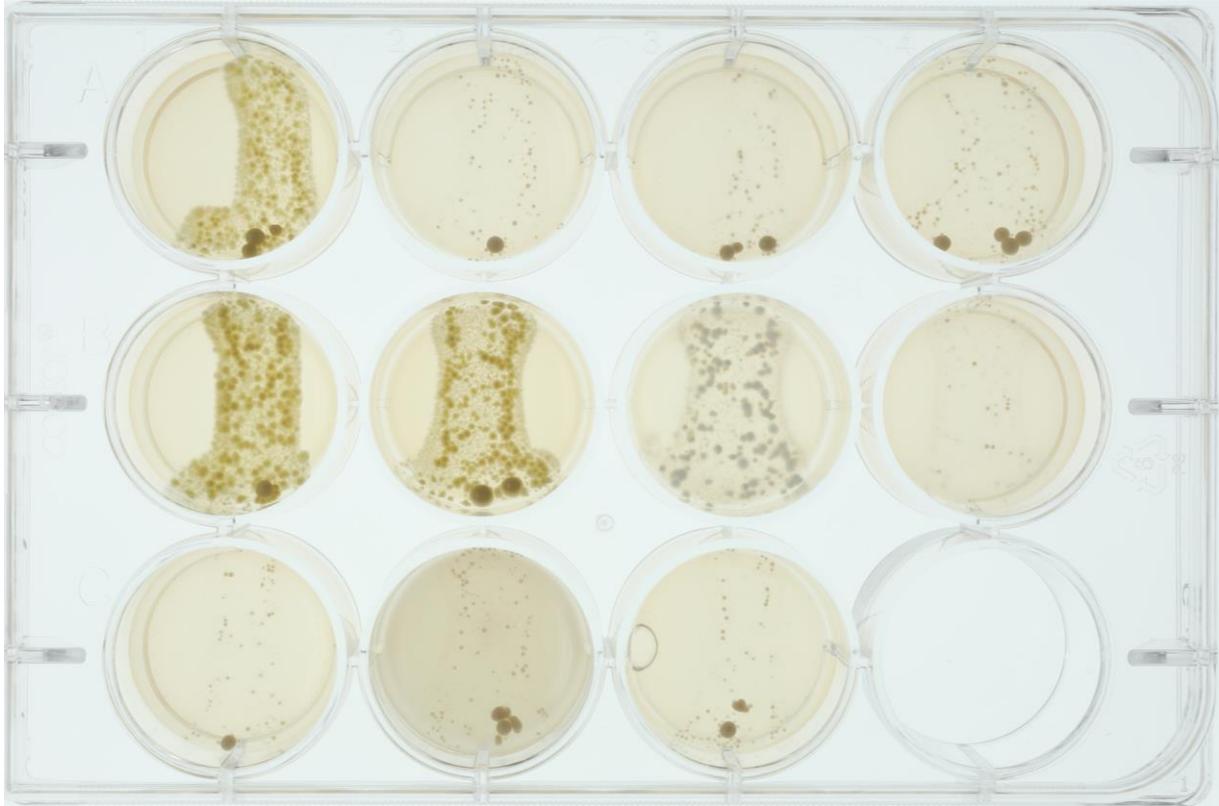
Plates (535, ISP2, ISP3, ISP4, ISP5, ISP7)



(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%)

