

Compendium of Actinobacteria from Dr. Joachim M. Wink  
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Strain		DSM 45666
Genus		<b><i>Nocardia</i></b>
Species		<b><i>endophytica</i></b>
Status		
Risk group		L1 (provisional classification by DSMZ)
Type strain		KLBMP 1256, CCTCC AA 2010004, KCTC 19777 DSM 45666
Reference		Int. J. Syst. Evol. Microbiol. 61:1857*
Author		Xing, K., Qin, S., Fei, S. M., Lin, Q., Bian, G. K., Miao, Q., Wang, Y., Cao, C. L., Tang, S. K., Jiang, J. H., Li, W. J.
Title		<i>Nocardia endophytica</i> sp. nov., an endophytic actinomycete isolated from the oil-seed plant <i>Jatropha curcas</i> L.
Journal		<i>Int J Syst Evol Microbiol</i>
Volume		<b>61 ( Pt 8 )</b>
Page		1854-1858
Year		2011
Morphology		
Agar	ISP 2 - growth/G	good
Agar	ISP 2 - colony color/R	pastel yellow (1034)
Agar	ISP 2 - aerial mycelium/A	cream (9001)
Agar	ISP 2 - soluble pigment/S	none
Agar	ISP 3 - G	sparse
Agar	ISP 3 - R	pastel yellow (1034)
Agar	ISP 3 - A	cream (9001)
Agar	ISP 3 - S	none
Agar	ISP 4 - G	sparse
Agar	ISP 4 - R	pastel yellow (1034)
Agar	ISP 4 - A	none
Agar	ISP 4 - S	none
Agar	ISP 5 - G	good
Agar	ISP 5 - R	pastel yellow (1034)
Agar	ISP 5 - A	cream (9001)
Agar	ISP 5 - S	none
Agar	ISP 6 - G	good
Agar	ISP 6 - R	sand yellow (1002)
Agar	ISP 6 - A	pure white (9010)
Agar	ISP 6 - S	none
Agar	ISP 7 - G	good
Agar	ISP 7 - R	red brown (8012)
Agar	ISP 7 - A	pure white (9010)
Agar	ISP 7 - S	copper brown (8004)
Agar	suter with tyrosine - G	good

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Agar	suter with tyrosine - R	nut brown (8011)
Agar	suter with tyrosine - A	oyster white (1013)
Agar	suter with tyrosine - S	ochre brown (8001)
Agar	suter without tyrosine - G	good
Agar	suter without tyrosine - R	brown beige (1011)
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	
sodium chloride tolerance		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	1
Api zym	Esterase (C4)	2
Api zym	Esterase Lipase (C8)	3
Api zym	Lipase (C14)	0
Api zym	Leucin arylamidase	5
Api zym	Valine arylamidase	1
Api zym	Cystine arylamidase	0
Api zym	Trypsin	0
Api zym	Chymotrypsin	0
Api zym	Phosphatase acid	4
Api zym	Naphtol-AS-BI-phosphohydrolase	1
Api zym	alpha galactosidase	0
Api zym	beta galactosidase	1
Api zym	beta glucuronidase	0
Api zym	alpha glucosidase	1
Api zym	beta GLUCOSIDASE	4
Api zym	N-acetyl-beta-glucoseamidase	0
Api zym	alpha mannosidase	0

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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	-
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 45666 .

## Apizym



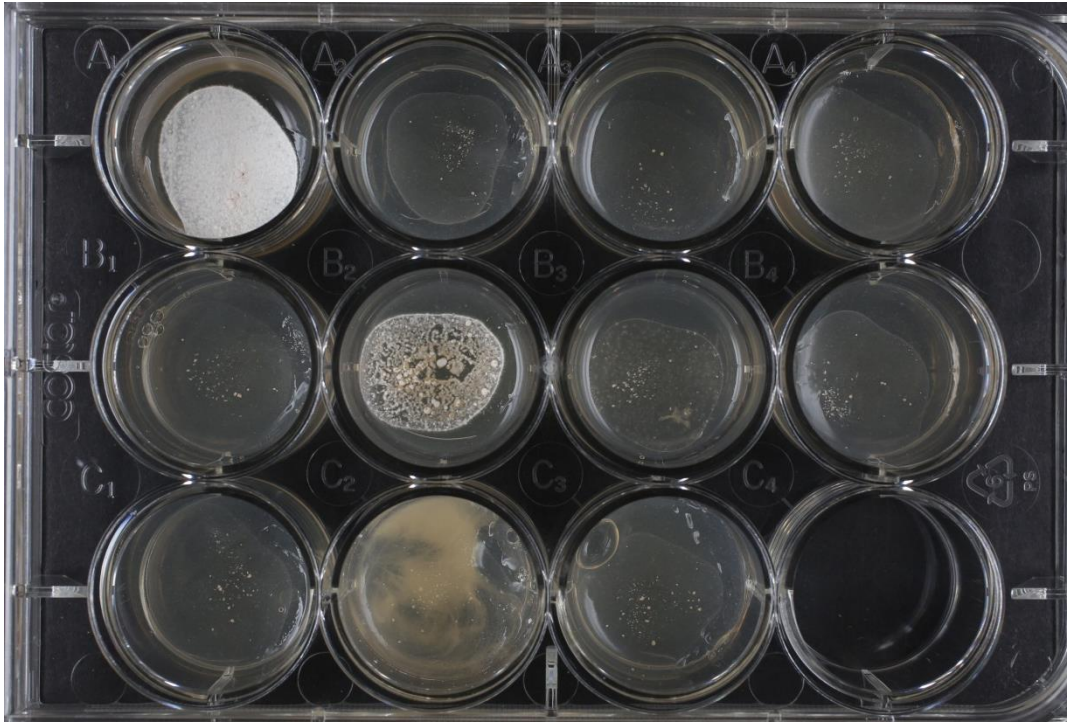
Abbildung 2: Apizym-Teststreifen mit Keim DSM 45666.



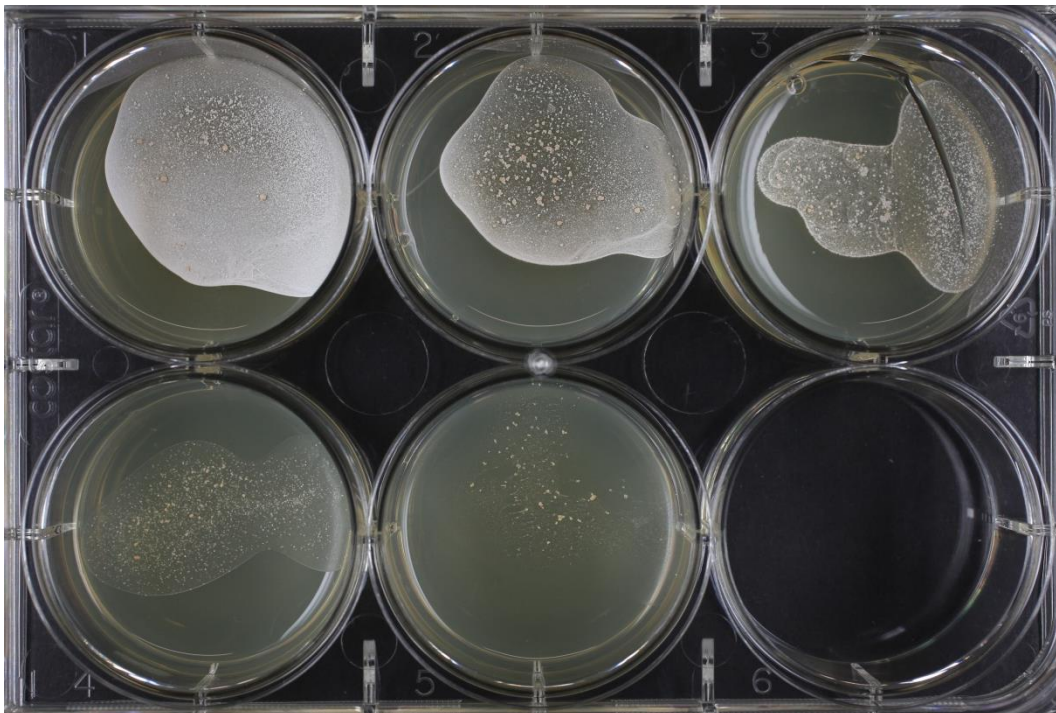
**Plates** (BHI, ISP2, ISP3, ISP4, ISP5, ISP7)



(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%)**