

Name: *Amycolatopsis decaplanina*

Authors: Wink et al. 2003

Status: New Species

Literature: Int. J. Syst. Bacteriol.

Risk group: 1 (German classification)

Type strain: DSM 44594, FH 1845, NRRL B-24209

Author(s) Wink, J., Gandhi, J., Kroppenstedt, R. M., Seibert, G.,
Schumann, P., Stackebrandt, E.

Title *Amycolatopsis decaplanina* sp. nov., a novel member of the
genus with unusual morphology.

Journal Int. J. Syst. Evol. Microbiol.

Volume 54

Page(s) 235-239

Year 2004

Fatty acid pattern:

| | | | |
|--------------------|------|---------------------|------|
| 14 : 0 Iso | 2,0 | 17 : 0 Anteiso | 3,0 |
| 14 : 0 | 1,0 | 17 : 1 Cis9 | 12,0 |
| 15 : 0 Iso | 20,5 | 16 : 0 Iso 2OH | 4,0 |
| 15 : 0 Anteiso | 5,5 | 17 : 0 | 10,0 |
| 15 : 0 | 5,0 | 17 : 0 Anteiso 2 OH | |
| 16 : 0 Iso | 7,0 | | |
| 15 : 0 Anteiso 2OH | 3,0 | | |
| 16 : 0 | 5,0 | | |
| 17 : 0 Iso | 2,0 | | |

Genus: *Amycolatopsis*
Species: *decaplanina*
Type strain: DSM 44594

FH 1845

Morphology:

| | | |
|--------------|-------|--------------|
| | G | R |
| <u>ISP 2</u> | good | honey yellow |
| | A | SP |
| | none | none |
| | G | R |
| <u>ISP 3</u> | good | honey yellow |
| | A | SP |
| | white | none |
| | G | R |
| <u>ISP 4</u> | good | honey yellow |
| | A | SP |
| | none | none |
| | G | R |
| <u>ISP 5</u> | good | honey yellow |
| | A | SP |
| | none | none |
| | G | R |
| <u>ISP 6</u> | good | honey yellow |
| | A | SP |
| | none | none |
| | G | R |
| <u>ISP 7</u> | good | honey yellow |
| | A | SP |
| | white | brown |

Spore chains:

Sporangia: sporangia like structures

Spore surface:

- Fragmentation: -

Melanoid pigment: - - - -

NaCl resistance: 5 %

Lysozyme resistance:

pH: Value-

Optimum-

Temperature : Value-

Optimum- 28°C

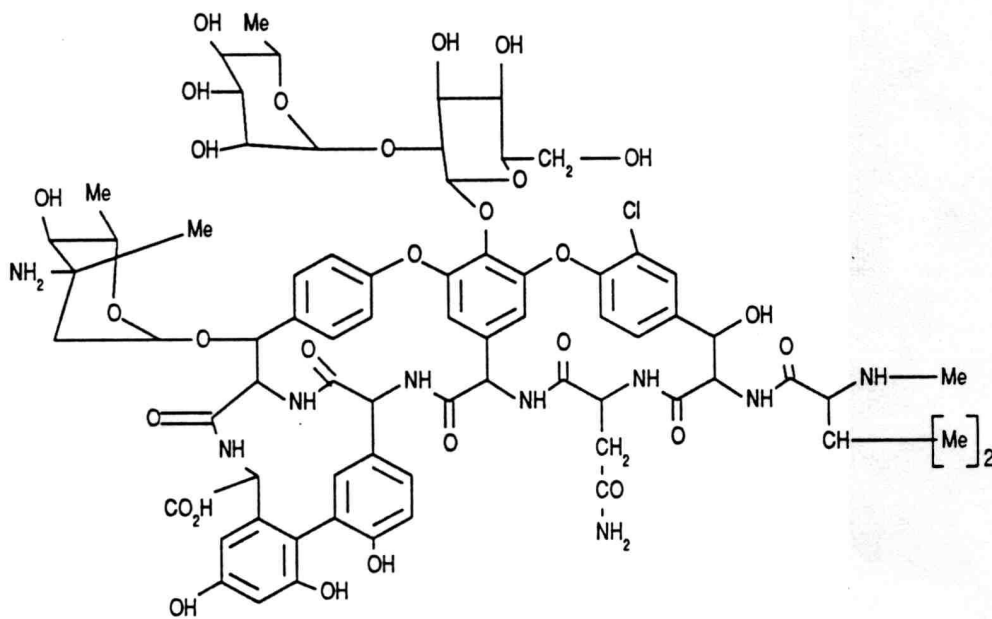
Carbon utilization:

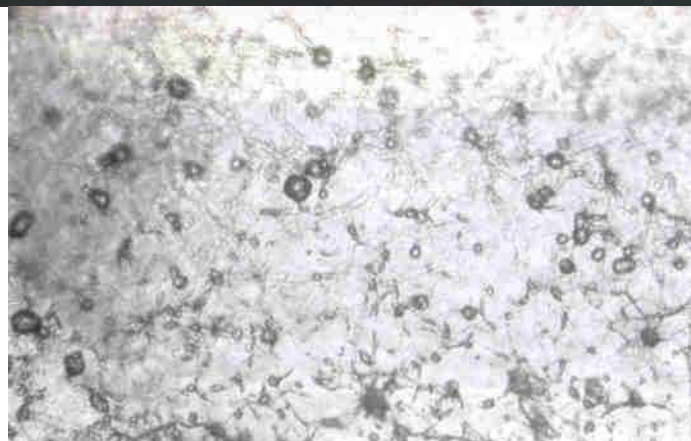
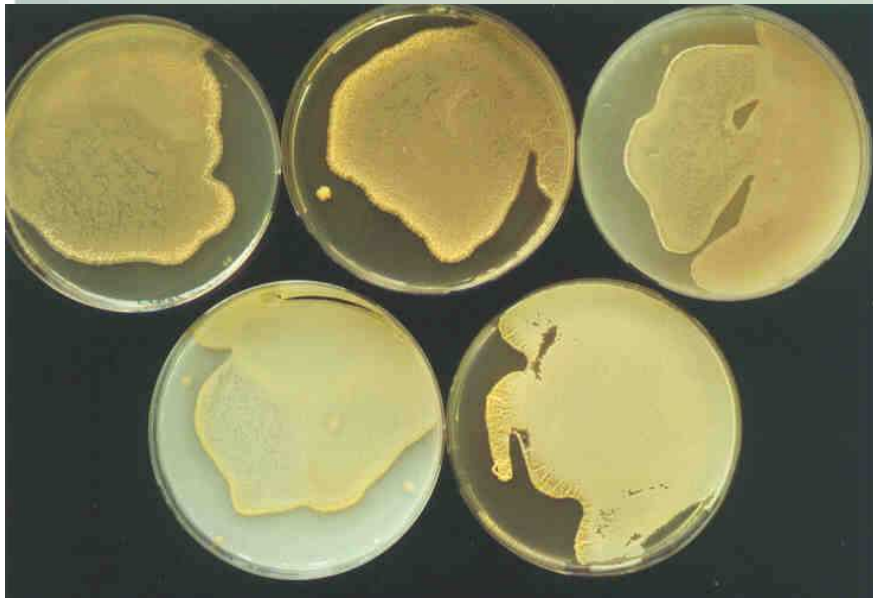
| | | | | | | | | | |
|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| Glu | Ara | Suc | Xyl | Ino | Man | Fru | Rha | Raf | Cel |
| + | + | - | - | - | + | + | - | - | - |

Enzymes:

| | | | | | | | | | | |
|-----|-----|-----|-----|------|-------|-----|-----|-----|-----|-----|
| Gel | Cit | Ure | Arg | Onp | Trp | Lys | Odc | VP | Ind | H2S |
| + | - | + | - | + | - | - | - | + | - | - |
| 2+ | 3- | 4- | 5- | 6(+) | 7 (+) | 8- | 9+ | 10+ | 11+ | 12+ |
| 13- | 14+ | 15- | 16+ | 17+ | 18+ | 19- | 20- | | | |

Decaplanin, a glycopeptide antibiotic active against gram-negative bacteria, produced by *Amycolatopsis decaplanina*

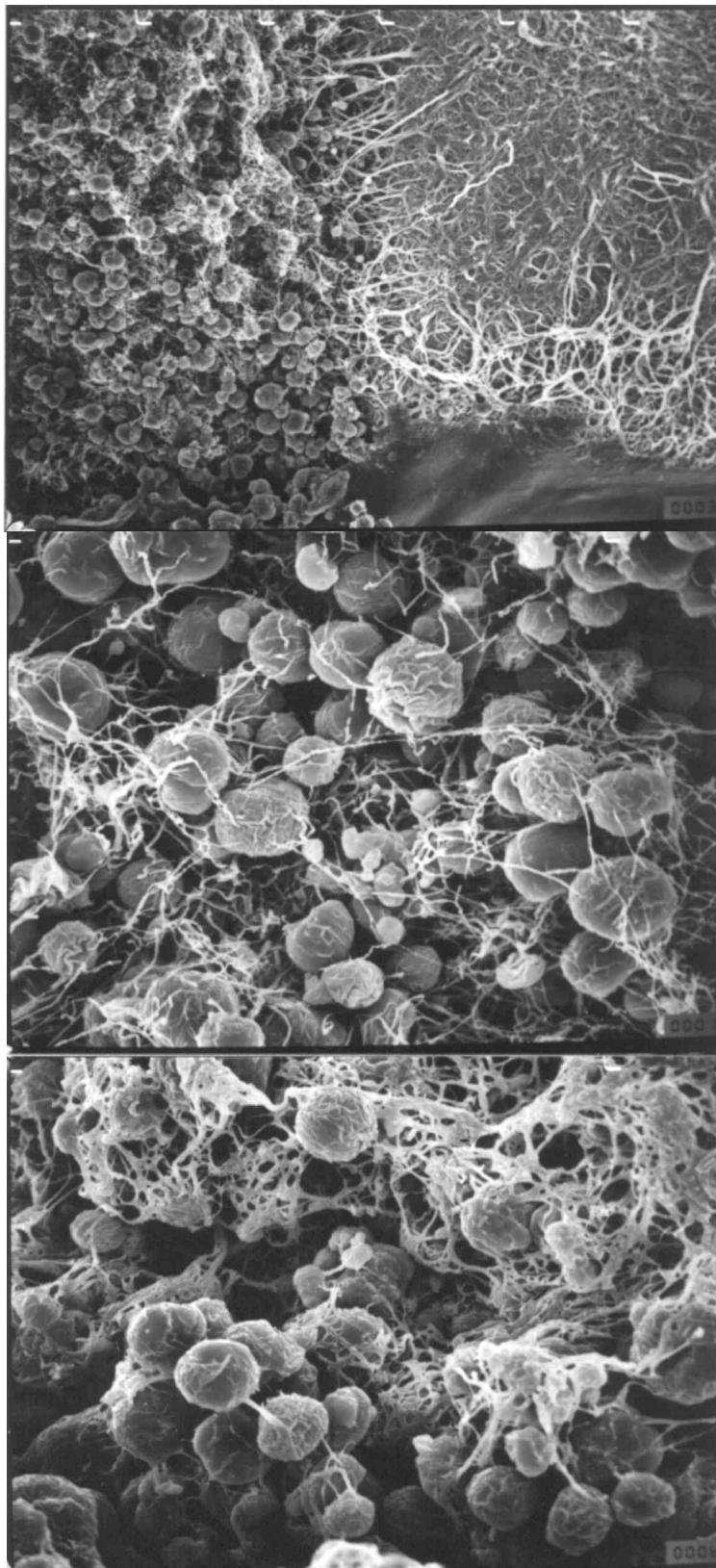




Amycolatopsis decaplanina

A and B – Agar plates medium 5006, 5265, 5315, 5317 and 5322

C – Light microscopy of the pseudosporangia (x 350)



Amycolatopsis decaplanina

Aerial mycelium with pseudosporangia (SEM)

D – x 200 E and F – x 1000