RECOMMENDATIONS FOR DESCRIPTIONS OF
SOME ACTINOMYCETALES APPEARING IN
PATENT APPLICATIONS

International Committee on Bacteriological Nomenclature
Subcommittee on Taxonomy of the Actinomycetes

The Subcommittee recommends for the Actinomycetales,
exclusive of the Mycobacteriaceae

- 1) that Patent offices accept microorganisms for process patents which fit any of the taxa in Rules 6, 7, 8 of the International Code of Nomenclature of Bacteria and Viruses;
- 2) that the following minimum of criteria should be used in a description for a patent:
  - a) Morphological observations*
    1. Morphology of spore-bearing hyphae:
Simple or verticillate; whether straight, flexuous, loops (open spirals), or spirals (closed spirals). Included in the description of the sporophore should be a reproduction of a picture or drawing of these structures.
    2. Number of spores whether single, pairs, number of spores from 3 to 10, and more than 10 forming a chain.
    3. Presence of globular sporangia as in Actinoplanaceae.
    4. Presence of flagellated spores, as in Actinoplanes.
    5. Ability to form aerial mycelium.
    6. Formation of conidiophores and conidia on substrate and/or aerial mycelium.
    7. Tendency of the mycelium to fragment.
    8. Morphology of spore surface observed under the electron microscope.
    9. Occurrence of sclerotia.

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* For all the morphological examinations a well-sporulated culture be used, if the organism being described can form spores.

b) Colour:

Description of any significant colour. Chemically defined media on petri dishes should be used, and age of cultures, temperature and medium be stated.

Record colour of surface of well-sporulated aerial mycelium, also the reverse and surface of vegetative mycelium.

Record any diffusible pigment; other helpful observations would be the pH-effect on colour and the general nature of the pigment.

c) Physiological characters:

1. Melanin production studied on Pepton-Iron-Agar and/or on Organic Medium of Gause.
2. Utilization of the following carbohydrates:

Control without carbohydrates
d-Glucose (as positive control)
l-Arabinose
Sucrose
d-Xylose
i-Inositol
d-Mannitol
d-Fructose

d) Temperature:

The ability to grow at 50°C should be determined.

e) Microaerophilic growth.

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