



FUNGAL GLOSSARY

Penicillium

Natural Habitat

- ◆ Soil
- ◆ Seed
- ◆ Cereal crops

Suitable Substrates in the Indoor Environment

- ◆ Foods (blue mold on cereals, fruits, vegetables, dried foods)
- ◆ House dust
- ◆ Fabrics
- ◆ Leather
- ◆ Wallpaper
- ◆ Wallpaper glue

Water Activity

- ◆ Aw=0.78-0.86

Mode of Dissemination

- ◆ Wind
- ◆ Insects

Allergenic Potential

- ◆ Type I (hay fever, asthma)
- ◆ Type III (hypersensitivity)

Potential Opportunist or Pathogen

- ◆ Penicilliosis

Industrial Uses

- ◆ *P. chrysogenum* for the antibiotic penicillin
- ◆ *P. griseofulvum* for the antibiotic griseofulvin
- ◆ *P. roquefortii* for Roquefort cheese
- ◆ *P. camemberti* for Camembert cheese
- ◆ Brie, Gorgonzola, and Danish Blue cheese are also the products of *Penicillium*
- ◆ Used to cure ham and salami
- ◆ Production of organic acids such as fumaric, oxalic, gluconic, and gallic

Potential Toxins Produced

- | | | |
|----------------------|---------------------|--------------------|
| ◆ Citrinin | ◆ Mycophenolic acid | ◆ Secalonic acid D |
| ◆ Citreoviridin | ◆ Paxilline | ◆ Verruculogen |
| ◆ Cyclopiazonic acid | ◆ Penitrem A | ◆ Verrucosidin |
| ◆ Fumitremorgen B | ◆ Penicillic acid | ◆ Viomellein |
| ◆ Griseofulvin | ◆ Ochratoxins | ◆ Viridicatumtoxin |
| ◆ Janthitrems | ◆ Roquefortine C | ◆ Xanthomegnin |

Other Comments

- ◆ *Penicillium* is one of the most common genera of fungi

References

- ◆ Alexopoulos, C.J., Mims, C.W., Blackwell, M. 1996. John Wiley and Sons