

Fungi in everyday life



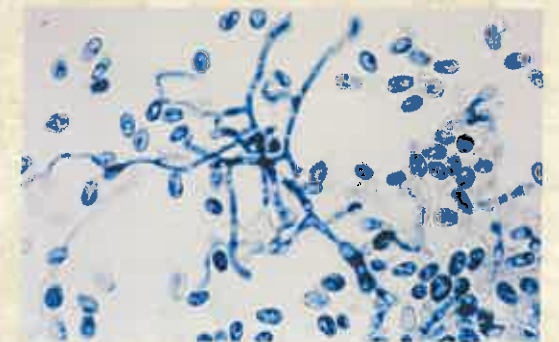
Bioremediation

- The decontamination of soil and water from pollutants or toxins (like heavy metals, pesticides, dyes...) using microorganisms (bioremediators) is called bioremediation
- Mycoremediation is the name for remediation through fungi
- The right fungal species is needed for a successful mycoremediation

Example: *Phanerochaete chrysosporium*, A white-rot fungi



- Origin of name: During the process of digesting lignin, specialised enzymes are secreted which gives a bleached appearance to wood (->white-rot).
- More efficient than other fungi in degrading insoluble or toxic materials.
- Presents simultaneous reductive and oxidative mechanisms which enable its use in many different situations
- Digests the lignin component in lignin cellulose, which can be found in a range of compounds
- The main reason that white-rot fungi are active to such a wide range of compounds is their secretion of extra- cellular lignin-modifying enzymes, so they can act upon various molecules that are similar to lignin



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