

Title: Molecular Mycology [3-0-0-6]

Content :

Introduction: Interesting world of fungi; Economic importance of fungi around us – Benefits (medicinal & commodities etc) and losses (diseases etc)

Fungal Genetics and Biology: Distinct features of fungal genomes and their biological significance; Fungal secondary metabolism & biomolecules

Fungal diseases: Plant fungal diseases - Patho-biology - Molecular Mimicry - Disease control strategies; Clinical Mycology - Patho-biology - Diagnostics & Disease control strategies

Prospects: Pressing need of new antifungals; Interesting source of new molecular tools (fluorescence/luminescence etc)

Texts / References:

- 1) Fungal Biomolecules. Edited by Vijai Gupta, Robert Mach and S. Sreenivasaprasad. Wiley Blackwell.
- 2) Molecular Fungal Biology. Edited by Richard Oliver & Michael Schweizer. Cambridge University Press.
- 3) Fungal Biology. By J. W. Deacon. Blackwell publishing.
- 4) The Mycota – Biology of the fungal cell - VIII. By D. Hoffmeister & M. Gressler. Edited by Karl Esser. Springer publisher.
- 5) Entangled Life. By Merlin Sheldrake.
- 6) Various Research & Review articles cited in the ppt presentation.