

**I.BTC 3676-002 –** Biotechnologies of fungi and marine organisms for agricultural use

**II.COURSE HOURS PER WEEK THEORETICAL**: Thirty (30)

**III.Professor(s):**

Prof. Robson Marcelo Di Piero, Engenheiro Agrônomo e Doutor em Fitopatologia (ESALQ/USP),

Professor do Departamento de Fitotecnia/CCA/UFSC (Coordenador).

**IV.COURSE SYNOPSIS**

Use of biological agents to control insect pests and phytopathogens. Biotechnological potential of algae and cyanobacteria in agriculture. Biotechnological use of substances derived from crustaceans (chitin and chitosan) to control plant diseases. Induced resistance in plants against insects and pathogens. Products of agricultural interest based on micro-organisms. Legislation of natural phytosanitary products.

**V. MAIN BIBLIOGRAPHY**

ALVES, S.B. **Controle microbiano de insetos**. Piracicaba: FEALQ, 1998, 2ª edição, 1163p.

ANKE, T. **Fungal Biotechnology.** Germany, Champman & Hall GmbH, 1997. 409p.

CAVALCANTI, L., DI PIERO, R. M., CIA, P., PASCHOLATI, S. F., RESENDE, M. L. V., ROMEIRO, R. **Indução**

**de resistência em plantas a patógenos e insetos**. Piracicaba: FEALQ, 2005, v.1, 263p.

CHEN, F.; JIANG, Y. **Algae and their biotechnological potential.** Dordrecht, Kluwer Academic Publishers, 2001.

306p.

JONG, S.C.; BIRMINGHAM, J.M. Medicinal and therapeutic value of the shiitake mushroom. **Advances in**

**Applied Microbiology**, v.39, p.153-184, 1993.

KULIK, M.M. The potencial for using cyanobacteria and algae in the biological control of plant pathogenic

bacteria and fungi. **European Journal of Plant Pathology**, v.101, p.585-599, 1995.

RYALS, J.; NEUENSCHWANDER, U.; WILLITS, M.G.; MOLINA, A.; STEINER, H.Y.; HUNT, M.D. Systemic

acquired resistance. **Plant Cell**, v.8, n.10, p.1809-1819, 1996.

STADNIK, M.J. & TALAMINI, V. **Manejo Ecológico de Doenças de Plantas**. CCA/UFSC: Florianópolis,

293p. 2004.