

Abstract

The work focuses on the physiology of wood-rotting fungi and the possibilities of their inhibition by physical methods (microwave and gamma irradiations, dry heat) or newly developed chemical preparatives containing metallic nanoparticles. The effect of abovementioned treatments on mycelial growth, activities of extracellular enzymes responsible for wood degradation and on spore germination or viability was studied in selected strains of wood-rotting fungi obtained from culture collection (*Coniophora puteana*, *Fibroporia vaillantii*, *Gloeophyllum sepiarium*) or isolated from infected buildings (*Serpula lacrymans*).