

Fungi Bioluminescence: Mechanistic Study and Application in Environmental Toxicology

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Although fungi bioluminescence has been reported since Aristotle, the pathways involved in light emission as well as the identity of the emitter and its biological function(s) remain unsolved. Likewise firefly bioluminescence, which study allowed the development of several analytical tools, such sensors forevaluation of contaminated food and luc reporter gene as a probe in Molecular Biology, the elucidation of the light emission mechanism in fungi could generate new theoretical and applied knowledge. Currently, our group develop a bioluminescent biosensor for the possible evaluation of environmental pollutants toxicology in contaminated soil/sediments and atmospheric samples.