Acid Phosphatase Distribution and Localization in the Fungus *Humicola lutea*

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Acid phosphatase activities in a culture liquid and mycelial extract were studied in submerged cultures of the filamentous fungus *Humicola lutea* 120-5 in casein-containing media with and without inorganic phosphate (Pi). The Pi-repressible influence on the phosphatase formation was demonstrated. Significant changes in the distribution of acid phosphatase between the mycelial extract and culture liquid were observed at the transition of the strain from exponential to stationary phase. Some differences in the cytochemical localization of phosphatase in dependence of Pi in the media and the role of the enzyme in the release of available phosphorus from the phosphoprotein casein for fungal growth were discussed.

*Key words:* Acid Phosphatase, Localization, Fungus