

Isolation and screening of phytase producing strains and optimizing the production of enzymes in them

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Phytic acid is an organic form of phosphorus that for monogastric animals such as poultry, pigs, humans and fish are not available and because they appropriate level of phytate hydrolysis enzymes in their gastrointestinal tract as a result phytase an important nutritional additives to increase the availability of phosphorus. Phytase manufacturer of the best sources, microbial sources, including: bacteria, fungi and yeast. In this study was to isolate the fungus *Penicillium* phytase as a manufacturer of agricultural land around the city of Qazvin on the environment took psm. Phytase produced by this fungus was then optimize the conditions and parameters such as: amount of phytate, pH, incubation time, and also as a source of cheap wheat bran phytate was studied as a result of the highest phytase activity sodium phytate optimal environment in terms of temperature and pH 5 and 30 ° Santygrayd warm incubation time of 72 hours, the activity of phytase u / m 171047, respectively. And in medium containing wheat bran in terms of Bhyynh to 30 ° Santygrayd and ph of 7 and 72 hours incubation period of warming enzymatic activity u / ml 61700 were observed.

Keywords : Phytase, *Penicillium*, Optimization of the medium, Phytate

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