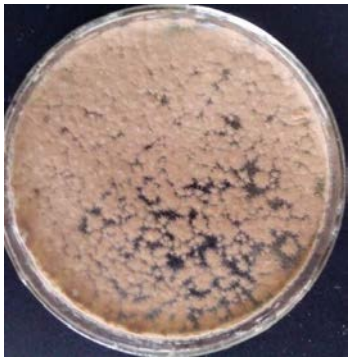
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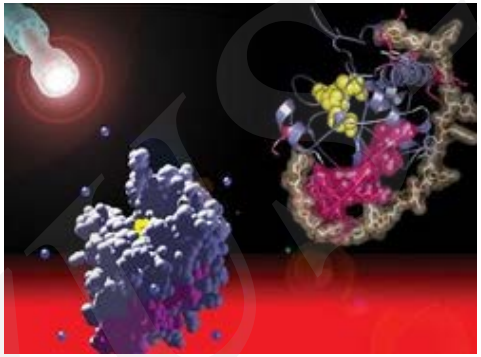
Characterization of β-glucosidase from *Aspergillus terreus* and its application in the hydrolysis of soybean isoflavones

Key words: β-glucosidase, *Aspergillus terreus*, Characterization, Hydrolysis, Soybean isoflavones

Research Summary

This research mainly focused on the purification and characterization of *Aspergillus terreus* β-glucosidase (At-Bgl), and its application in the hydrolysis of soybean isoflavones.







The main results were summurized as follows:

- **At-Bgl was a member of glycosyl hydrolase family 3 (GH3)**
- **At-Bgl showed maximal activity at pH 5.0 and 65° C**
- **Hydrolysis rate of At-Bgl for daidzin, genistin and glycitin were 95.8%, 86.7% and 72.1%, respectively.**

Innovation points

- **At-Bgl showed multiple industrial desired properties, including thermostability, wide pH stability, and high tolerance to pepsin and trypsin.**

- **This is the first report of an *A. terreus* β-glucosidase hydrolyzing soybean isoflavones and it showed second highest productivity for daidzein and genistein among the literiture reports.**

