

F-08

Progress in science and technology for traditional Chinese fermented soyfoods

*Na Zhang**, College of Food Engineering, Harbin University of Commerce, Heilongjiang, China

Bing Wang, College of Food Engineering, Harbin University of Commerce, Heilongjiang, China

Yan-Guo Shi, College of Food Engineering, Harbin University of Commerce, Heilongjiang, China

It is a centuries-old history for Chinese to prepare traditional fermented soyfoods, especially pickled tofu (PT). The texture of fermented bean curd is like soft cheese with highly digestible, unique flavor and nutritious component. Traditional Chinese fermented soyfoods have the disadvantages of unstable product quality and long fermentation cycle. Some strains were selected from traditional fermented soyfoods to promote the maturation of PT. Moreover, the fermentation conditions were controlled. The researcher also used some mutation technique to increase the hydrolysis activity of the protease which was metabolized from these strains. The flavor quality of the new kind of PT was analyzed with the fingerprint technology with the commonly PT product as contrast. , some strains were selected and used in PT production. The protease activities of *Bacillus natto 23413*, *Aspergillus oryzae 2035*, *Aspergillus oryzae 40214*, *Aspergillus niger 2395*, *Aspergillus flavus 2405* and *Wutongqiao Mucor* which were selected in the lab were increased significantly. Fermentation of PT were finished after 40 days. And the flavor components of the products were similar with traditional PT product. The quality and stability of the traditional Chinese fermented soyfoods were improved, fermentation cycle of the preparation of PT was shortened through the above research.