

Nutritional status of cherry (*Prunus cerasus*) seed kernels biodegraded with *Aspergillus niger* cultures

Emrah Gngr^{1*}

Aydın Altop¹

Ergin Ozturk¹

Gray Erener¹

¹: Ondokuz Mayıs University, Faculty of Agriculture, Samsun, Turkey

*: emrah.gungor@omu.edu.tr

The study was conducted to determine the effects of fungal solid state fermentation on nutritional properties of cherry (*Prunus cerasus*) seed kernels. Three *Aspergillus niger* strain (ATCC 9142, ATCC 200345, ATCC 52172) were used in this study. Before and after of fermentation, crude protein (CP), total ash (TA), total fat (TF), crude fiber (CF), nitrogen free extract (NFE), neutral detergent fiber (NDF), acid detergent fiber (ADF), acid detergent lignin (ADL) content of cherry seed kernels were determined to evaluate its nutritional status. Fungal fermentation increased CP content of cherry seed kernels from 27.52% to 41.66%, increased TA content from 2.60% to 7.89% and changed TF, CF, NFE, NDF, ADF, ADL content. These results suggest that solid state fermentation with *Aspergillus niger* can be used for utilization nutritional properties of cherry seed kernels to make having potential in animal nutrition.

Keywords: solid state fermentation, cherry seed kernel, prunus cerasus, aspergillus niger, animal nutrition