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Oral sessions | Crop Genetics and Physiology | O43: High Quality Food and Ingredients

## [O43] High Quality Food and Ingredients

Chair: Yoji Nitta (Fukushima University, Japan)

Chair: Akiko Fujita (Satake Corporation, Japan)

Thu. Sep 9, 2021 5:00 PM - 7:00 PM Room 4 (Oral) (Crop Genetics and Physiology)

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6:10 PM - 6:25 PM

### [O43-05] Effects of Packaging Materials and Storage Duration on Quality of Farm Saved Black Sesame (*Sesamum indicum* L.) in Central Dry Zone of Myanmar

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Sesame is one of the most important and ancient oil-seed crops. Storage and storage materials significantly effect on quality of seed during storage. Therefore, this study aimed to investigate the effects of different packaging materials and storage duration on farm saved black sesame (var. Samonnet) during storage. This study was conducted in pre-monsoon season (August 2016) and post-monsoon season (January 2017) at Central Dry Zone of Myanmar. The sesame was stored using two types of packaging materials, woven polypropylene bags and pioneer air-tight superbags (polyethylene) at six farmers' houses in each crop. Crude carbohydrate, protein, ash, oil content, free fatty acid percentage were measured. The data were recorded before storage and every two-month during the storage period of eight months. Significant effect of packaging materials on quality of black sesame was not observed in both seasons except decreasing free fatty acid percentage in pre-monsoon crop. However, during storage, ash, crude carbohydrates and free fatty acid value decreased and increasing trend of protein and oil content were found in pre-monsoon sesame. The ash, crude carbohydrates and oil content were not different from initial values, whereas, decreasing protein content and increasing free fatty acid value were recorded in post-monsoon sesame. It can be seen that protein degradation and lipid oxidation were not distinct during storage. The trend of changes of biochemical processes during storage were different between cultivated seasons of crop.