

Effect of storage on biochemical changes in groundnut (*Arachis hypogaea* L.) during *Kharif* and summer

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SUMMARY

The biochemical changes during storage were studied in a set of fifty five spreading and semi spreading types of groundnut genotypes (*Arachis hypogaea* L.). The studies indicated the effect of season and storage periods on these parameters. The genotypes behaved differently in different seasons and under different storage periods. Under storage both oil and protein showed marked reduction in their content. The variations were clearly observed in SDS PAGE analysis of protein and esterase isozymes. In the protein analysis 769 bands were observed in fresh *Kharif* 2010 seed whereas 696 bands were observed in stored summer 2010 seeds. The PIC (Polymorphism information content) of both summer and *Kharif* 2010 seed was found to be 0.94. Esterase analysis showed 181 bands in the fresh *Kharif* 2010 seed while, 101 bands were recorded in stored summer 2010 seed. The lower PIC value observed in *Kharif* and summer seasons for esterase isozymes as compared to proteins indicated that genotypic characterisation using the latter may be more reliable than former.

Key Words : Banding patterns, Isozymes, Oil content, Protein content, Storage period

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