

THE INVESTIGATION ON GROWTH AND YIELD CHARACTERISTICS  
OF SOYBEAN

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The variability in growth and yield of 15 soybean (Glycine max (L.) Merr.) cultivars was studied. The characteristics included in the study were days to flowering, days to maturity, plant height, pods per plant, seed size, protein content and yield. Analysis of variance was performed for all the characteristics and found that a considerable variation existed for each character under consideration. Correlation coefficients were computed between all traits reported. A significant direct relationship was present between yield and others, except for protein content which was inversely related to yield. Such a relationship between yield and protein content is critical for high protein crop like soybean. Another correlation of importance is between pods per plant and seed size which was found negative, explainable through source-sink relationship<sup>1</sup>. The wide variability that existed in different characteristics and their relationship to each other would be valuable tools to manipulate and synthesise suitable cultivars in soybean improvement programme.

## Reference:

- <sup>1</sup>Gardner, F.R., Pearce, R.B. and Michell, R.L. (1985)  
Physiology of Crop Plants. The Iowa State University  
Press, Iowa.

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