THE EFFECTS OF WATERLOGGING ON GROWTH DEVELOPMENT AND YIELD OF MUNGBEANS

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Abstract

Experiments were conducted to evaluate the effects of waterlogging on the growth and yield of mungbeans and to identify characters to be used for screening for resistance to waterlogging. It was found that waterlogging reduced plant height, plant dry weight, root dry weight, leaf area, number of leaves, seed yield, pods per plant, seeds per plant and seed size. However, it increased the number of days to flower. Within 2-3 days of waterlogging, primary and secondary roots were damaged and replaced through the development of adventitious roots. Selection of mungbeans for resistance to waterlogging was attempted by using different indices developed in this study. It also was found that the response of mungbeans to waterlogging at different stages of growth was not consistent.

Key words: Mungbean, black gram, waterlogging.

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