EVALUATION OF SOME ADVANCED MID-SEASON POTATO HYBRIDS FOR NORTH-EAST ALLUVIAL PLAINS OF BIHAR

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A field experiment was conducted during the year 2003-2004 in two sets harvested at 60 days and 75 days respectively at Dholi farm situated in the agro climatic Zone I of Bihar to evaluate seven hybrids viz., J/92-167, J/ 93-4, J/93-77, J/93-81, J/93-86, J/93-87 and J/93-139 against two controls Kufri Ashoka and Kufri Jawahar. The experiment was planted in RBD with three replications on 19-11-03 in plot size of 3m x 2.4 m with spacing of 60 cm x 20 cm. The data on percent plant emergence at 30 days, total and marketable tuber yield (>20g) at 60 days and 75 days after sowing and percent tuber dry matter of the hybrids/verities under investigations were recorded. Plant protection measures were taken as per recommendation. The data showed no significant differences among the hybrids/verities for percent plant emergence at 30 DAS in both the sets of experiments, but hybrid J/93/-81 having 81.73 and 89.27 percent plant emergence proved superior. The variation in total and marketable tuber yield were non significant at 60 DAS, whereas hybrids/verities showed significant differences in 75 days crop. The hybrid J/93-81 proved highest yielder with 252.78 and 236.11q ha for total and marketable tuber yield respectively and was found significantly superior to variety Kufri Ashoka for both parameters. The hybrids/verities showed significant differences for percent tuber dry matter in both the sets of experimentation and hybrid J/93-139 and cv. Kufri Jawahar had higher percent tuber dry matter (16.26 and 17.13 percent, respectively). Keeping in view all the parameters under study, the overall performance of hybrid J/93-81 proved its superiority over all the hybrids/verities and found suitable for Zone-I of Bihar.

J/ 93-86 : A PROMISING EARLY BULKING POTATO HYBRID FOR GUJARAT


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Gujarat state has a very short cool growing period during winter. Potato is normally harvested by mid February to last week of March. Potato growers often face the problem of glut and lower market prices mainly due to bulk arrival of potatoes from most of the states during this peak arrival period. To circumvent this situation some farmers are growing early crop of potato (75 days crop duration) and sell it before normal harvesting season to fetch premium prices. Seven advanced hybrids and three varieties released by CPRI, Shimla were evaluated in randomized block design with six replications at Potato Research Station, Sardarkrushinagar Dantiwada Agricultural University, Deesa, during rabi seasons of 2003-04 and 2004-05. Hybrid J/93-86 gave significantly higher total (200.78 q/ha) and marketable tuber yield (187.80 q/ha) followed by cv. Kufri Ashoka (174.33 q/ha) and cv. Kufri Pukhraj (143.26 q/ha) at 60 days after planting (DAP). It gave 15.17% higher total tuber yield than best control cv. Kufri Ashoka and 31.09% higher marketable yield over best control cv. Kufri Pukhraj. For 75 days harvest, hybrid J/93-86 recorded significantly higher total tuber yield (427.96 q/ha) followed by cv. Kufri Pukhraj (382.24 q/ha). Similar trend for marketable tuber yield was also observed. This hybrid gave 11.96% and 16.62% higher total and marketable tuber yields, respectively than best check cv. Kufri Pukhraj. Hybrid J/93-86 registered highest per cent marketable yield both at 60 and 75 DAP. Keeping the state potato requirement in view, hybrid J/93-86 was found suitable for early harvest and showed potential to replace the popular variety of the region cv. Kufri Pukhraj and it would also be remunerative to the farmers.