POTATOES (Solanum tuberosum) RESPONSE TO DIFFERENT TIMES OF HAULMS DESTRUCTION

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ABSTRACT

In 1989, field experiments were conducted at Agriculture Research Station, Mingora and Sub-Station, Kalam to study the effect of haulms destruction on number of seed size tubers, ration size tubers, skin maturity and yield of potatoes. Haulms destruction was carried out with 8 days interval, starting from 90.98.106.114 days after sowing.

It was observed that early haulms removal significantly increased the number of seed size tubers at both the experimental sites. The average number of seed size potatoes per treatment were, 120.33,111.00,104.00 and 91.33 at Kalam while at Mingora, those were 100.33.98.66,95.33 and 78.33. Similarly, late haulms removal significantly increased the average number of ration size tubers per treatment. At Kalam, the average number of ration size potatoes were 86,80,95.33 and 110.3 and at Mingora, these were 81.33, 71.00, 86.00 and 102.00 respectively. Yield (tons/ha) at Mingora was non significant. However, early removal of haulms gave the yield of 12.8 tons/ha and late haulms removal gave the yield of 15.2 tons/ha. While at Kalam, significant yield of 13.33,15.83, 15.56 and 19.17 tons/ha was obtained respectively.

INTRODUCTION

In Pakistan, the general lack of high quality seed is perhaps the most important single factor reducing yield. No aspect of potato growing is more important than selection of the best possible seed as the yields are directly related to the quality of seed planted than any other single factor. Successful seed production does not depend on altitude only, but on the absence of aphids during the growing season and on the maturation of haulms before any great development in the aphids population occurs. Haulm cuttings decrease the tuber yield by 11%, decrease the average tuber weight, reduce the skin bruises, and occurrence of black spot increases at the latest harvest only (Varis, 1976). Schierhon (1981) reported that the number of days from planting to haulms destruction ranged from 113 in 1974 and 134 in 1975 and was not correlated with yield. Man and Draica (1981) recommended later removal of haulms from potato plants grown for seed. He further reported that with later removal the greater tuber yield was obtained but with high