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RESPONSE OF SOME SORGHUM GENOTYPES TO THE ATTACK OF LONG SMUT (TOLYPOSPORIUM EHRENBERGII).

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ABSTRACT

Different varieties of sorghum responded differently to the attack of long smut (Tolyposporium ehrenbergii). On the basis of grain infection, the variety N.K. 125 was found to be the most resistant variety followed by N.K. 130, AUS-5 and AUS-6 as they exhibited the lowest infection of 0.14, 0.17, 0.19 and 0.23 percent respectively. The two varieties Milo Martin and Red Lane with 0.71 and 1.11 percent of infection were graded to be intermediate whereas the remaining varieties showed the highest susceptibility ranging from 2.01 to 26 percent.

INTRODUCTION

Sorghum (Sorghum bicolor L. Moench), ranks forth among the world's cereal crops after wheat, rice and corn and is a staple food for some 600 million people in the semi arid tropics and sub-tropics 8. In Pakistan sorghum is the second important crop after maize. In N.W.F.P. its cultivation covers 70,000 acres and most of the area is situated in the Southern districts of the Province. In these areas sorghum grain is a staple food of the rural people and the fodder is fed to the live stock. In Pakistan the average yield of 250 kgs/acre as compared with 1500-2000 kgs/acre yield in other countries of the world 7. Among other causes of low yieldof sorghum diseases and insect pest play an affect the grain production significantly. Long smut of jowar incited by Tolyposporium eherenbergii is an important and distruc-