OCCURRENCE OF COMMON MAIZE DISEASES IN KIAMBU, EMBU AND NAKURU COUNTIES OF KENYA

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Abstract (C2117)
Maize is an important food crop in Kenya and is consumed by over 80% of the population. Maize is produced in most regions of Kenya, including areas where it is not suited. A survey was done in different agro-ecological zones in Kiambu, Embu and Nakuru counties to determine the occurrence of northern leaf blight (NLB, *Exserohilum turcicum),* common rust (*Puccinia sorghi),* maize streak disease (*Maize streak virus,* MSV), gray leaf spot (*Cercospora maydis),* head smut *(Sphaelotheca reiliana)* and common smut *(Ustilago maydis).* Structured questionnaires were used to obtain information from 13 farmers in Kiambu, 12 in Embu and and 16 in Nakuru. Data collected included the incidence and severity of each of the diseases. The most common disease in all the three counties was NLB with an average incidence of 90% and severity of 0.5 on a scale 0.5 to 5, indicating very low the severity. Common rust had a high incidence of 74%, but not very severe (average of 2 in a scale of 1 -5). MSV was present in all the counties with an average incidence of 2% and a severity score of up to 4 on a scale of 1 to 5. The most affected county was Kiambu, Embu and Nakuru, respectively. The incidences of GLS and head smut were very low with averages of below 2.5%. MSV was clearly the most severe disease and further studies on variability and reaction of different maize genotypes to the virus need to be elucidated. Although the severity of all other diseases is low, the diseases were recorded in all counties. There is likelihood that the status of these diseases can change to epidemic levels especially with climate change. Further studies on epidemiology and management options are needed.

Key words: Incidence, Maize, Occurrence, Maize diseases, Severity