



**TANZANIA PLANT HEALTH AND PESTICIDES
AUTHORITY (TPHPA)**



UPDATED REPORT ON THE OCCURRENCE OF MAIZE LETHAL NECROSIS DISEASE AND ITS ASSOCIATED VIRUSES IN THE FIELD AND IN THE MAIZE GRAIN SEEDS IN TANZANIA

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Maize is an important food and income earner for rural and urban dwellers in Tanzania. Productivity of maize in Africa can be affected by diseases like Maize Lethal Necrosis Disease (MLND). Following the first report of the occurrence of MLND in Tanzania, the Ministry of Agriculture through its Tanzania Plant Health and Pesticides Authority (TPHPA) pursuant to Plant Health Act No.4 of 2020; conducted monitoring surveys from 2016 to 2021 and recently in 2023 to establish the areas affected by the disease and identify the viruses causing the disease in the maize fields and grain consignments.

A comprehensive survey of MLND was conducted in the Lake Zone (Mwanza, Kagera, Shinyanga, Mara), Northern Zone (Kilimanjaro, Manyara, Arusha) Southern Highlands Zone (Ruvuma, Njombe, Iringa, Rukwa and Katavi), Central zone (Dodoma and Singida), Western Zone (Tabora) and the Eastern Zone (Tanga and Morogoro). Maize lethal necrosis disease (MLND) of maize (*Zea mays* L.) is caused by a combination of Maize chlorotic mottle virus (MCMV) and any of the cereal viruses in the Potyviridae group including Sugarcane mosaic virus (SCMV), Maize dwarf mosaic virus (MDMV), Maize mosaic virus (MMV) and Wheat streak mosaic virus (WSMV). RT-PCR method was used for detection of these viruses in the field-collected samples and from maize grain seed samples collected from Kasumulo Border in December 2023. Laboratory analysis of the samples did not detect any of the viruses from the maize grains as well as the field samples from the major maize producing regions in Tanzania. These findings suggest that maize grain seeds from Tanzania do not pose a risk of transmitting viruses causing MLND in the region. Detailed Report can be found on the Tanzania Government's websites

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