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RESEARCH NEWS

PHYSIOLOGICAL DISORDERS OF BANANA IN THE SOUTHERN DRY REGION

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During the last few years a number of unrecorded disorders was observed in banana grown in the southern dry region. These disorders appeared during the severe dry spells where the intensity of the solar radiation and atmospheric temperatures were high. The symptoms of these disorders were the longitudinal cracking of the base of the pseudostem, chalking and death of newly emerging leaves, retard male bud, breaking of pseudostem and formation of the splitted fingers. All these plants showed a negative response to pathogenicity tests. However under certain conditions pathogens could invade the affected plants secondarily. The information gathered revealed that these disorders were a result of adverse environmental conditions.

Commercial banana cultivations of *Ambul, Kolikuttu* and *Ash* plantain were subjected for the investigation. Eight cultivations were randomly selected from Hambantota district and Udawalawa area for collection of information.

Symptoms of the disorders are follows

Wilting of plants: May confuse with fusarium wilt, leaves turn yellow from the base, deep and longitudinal cracks appear at the base of the pseudostems and extend up to the corm, damage plants die.

Chalking and death of newly emerging shoots: Leaf sheaths stuck tightly and form a hard and tough crown, newly emerging leaves get stacked inside, flower buds burst-out through a weak point of the pseudostem, the pseudostems could break due to winds, dust collected at the crown get fermented and decayed with the onset of rains. The bacteria involve with fermentation and decaying spread downwards the pscudostems and perhaps cause decaying of the developing young leaves.

Formation of splitted fingures: Common in Ambul, Kolikuttu and Amban, deep and longitudinal cracks along the fruits are appear, secondary infections take place via the cracks of fruits, this disorder is prominent in rainy months which occurred immediately after the dry spells. Due to the severe water stress, tissues of the fruits get damaged with the absorption of water. These damaged tissues tend to expand and form cracks.