

**DID
YOU
KNOW?**



PANAMA DISEASE OR FUSARIUM WILT ON BANANA

known as "Foc TR4" caused by
the soil-borne fungus *Fusarium oxysporum f. sp. cubense* (Foc)

- A highly virulent form of Foc in Asia and one of the most devastating banana diseases in recorded history.
- Fungal chlamydospores of Foc TR4 can survive in the soil for more than 20 years (Stover R., 1962; Buddenhagen, 2009).
- Presents an imminent threat to the region's Cavendish-based banana industries.
- In the Philippines, the disease was first recorded in Calinan District, Davao City in 2009.
- Last 2019, in Davao de Oro and Davao del Norte it was reported that out of 12,738 ha of land planted with Cavendish, 6,211 hectares (49%) are infected with *Fusarium oxysporum* TR4 (Foc TR4).
- Validated areas with incidence of Foc TR4 in region 11 (Crop Year 2022) was around 9469.29 ha.
- Foc TR4 is only present infecting bananas in Mindanao region.



TYPICAL SYMPTOMS



wilting and yellowing of the older leaves around the margins



brownish discoloration of the inner tissue in the corm and pseudostem



Basal splitting

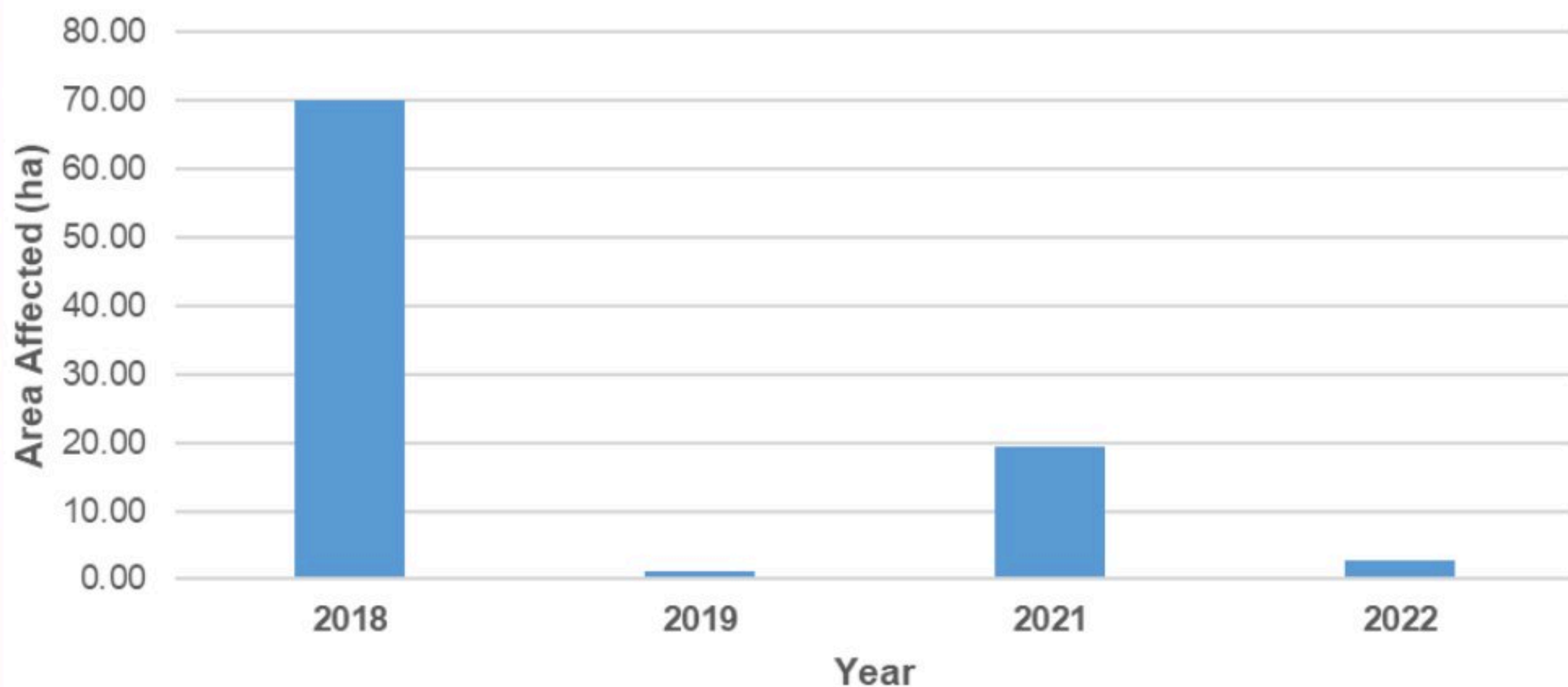


skirt of collapsed leaves around the pseudostem



National Trend of Foc TR4 Infection in the Philippines (2018-2022)

Foc TR4 Infection in the Philippines (2018-2022)



Source: BPI-Crop Pest Management Division (BPI-CPMD) and Regional Crop Protection Center (RCPCs)



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DISEASE MANAGEMENT RECOMMENDATIONS

Use of Resistant Varieties

- Use of resistant varieties such as GCTCV 218 and 219

Cultural/ Physical/ Mechanical Control

- Regularly disinfect farm tools and equipments, including footwears if the area is known to be infected
- Good drainage
- Removal of alternate hosts such as weeds

Biological Control / Use of Botanicals

- Application of strains of *Trichoderma* reported to be effective to control *Fusarium* like *T. harzianum*



PHOTOCREDIT:

- cabidigitallibrary.org

SOURCE:

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- Smarter Pest Identification Technology (SPIDTECH)

