Recognize the problem
Gummy Stem Blight, known by farmers in Trinidad and Tobago as “Bullet Hole”, is an important disease that affects all cucurbits. This fungal disease may affect leaves, stems and fruits. Foliar symptoms include circular lesions leading to necrosis, blight and leaf drop on later stages. These lesions may contain tiny black fungal fruiting bodies (pycnidia) on the surface of the lesions. Stem symptoms include small elongated lesions 4mm-6mm x 2mm wide. Initially fruit symptoms are small light brown or ash coloured holes with slight depression, named “Bullet Hole”, which later produce black coloured raised pustules. Infection invites the development of secondary pathogens.

Background
Gummy Stem Blight may be seedborne and it affects the crop at every stage of growth. Plant debris serve as the source of the inoculum. The disease occurs more often during the rainy season due to favourable environmental conditions for development and spreading. No known varieties of Christophene are resistant to the disease, fungicides may be used to help control it.

Management
- Seeds should be obtained from reliable sources or treated before planting.
- Prune and burn any leftovers from infected crops. Especially after a severe attack of Gummy stem blight.
- Avoid mechanical damage to the plant such as insect damage or damage through hoeing.
- Avoid overcrowding the field to control levels of humidity that favours the fungus.
- Drip irrigation is recommended over sprinklers to avoid helping the fungus to spread through splashing water. If only sprinklers are available, avoid irrigation during evening hours which is considered as a factor for increasing humidity and leaf wetness favouring infection. The practice of keeping the crop for more than three to four years should be avoided. The crop should be replanted once in every three years to attain high yield and to reduce the source of inoculum and susceptibility to pathogen infection.
- Use following fungicides in rotation at 10 days interval: cabendazim; tebuconazole and tiradimenol; bosalid and pyraclastrobin; chlorothalonil active ingredients.
- PMDG is available on this host pathogen combination.

Scientific name(s) > Didymella bryoniae (teleomorph), Phoma cucurbitacearum (anamorph)

The recommendations in this factsheet are relevant to: Trinidad and Tobago

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