Pacific Pests, Pathogens, Weeds & Pesticides - Online edition

Kaupala (Gummy stem blight) (007)

Fakamaopo'opo

- 'Oku mafola fakamamani lahi. Koe mahaki eni 'oku mahu'inga ki he famili 'o e meleni moe kiukamupa. (**see Fact Sheet no.201**)
- Ko e faka'ilonga ile'ile 'oku tupu vave 'aupito, 'uli'uli 'i he lau, mingimingi pea mate. Faka'ilonga 'oku mafahi e kau pea pikipiki hono huhu'a.
- 'Oku mafola 'a e fua 'o e fangikasi, mei he fanga ki'i tangai 'uli'uli 'i he 'ile'ila he lau mei he havili moe 'uha.
- **Founga malu'i anga maheni:** Feitu'u 'oku 'iai e lulunga 'akau 'oku fiema'u ke mama'o mei he feitu'u fai ai to, haka mao e kelekele pe koe me'a ke to ai, vakai'i e pulopula pe 'oku 'I ai ha faka'ilonga (spot) pea kapau 'oku 'i ai pea to'o, to fetongitongi faka ta'u 3 e ngoue, 'oua 'e to ofi ki ha ngoue meleni 'oku ma'u he mahaki, tanaki mo faka'auha e veve 'osi hono toli.
- **Founga malu'i 'aki e kemikale:** coppers, mancozeb, pe chlorothalonil 'i he 'aho 'e 7-10 kotoa pe, 'o fakatatau ki he tu'u 'a e 'ea.

Common Name: Gummy stem blight (Kaupala).

Scientific Name: *Stagonosporopsis cucurbitacearum*. Previously, *Didymella bryoniae*. Also known by the asexual state, *Phoma cucurbitacearum* or *Ascochyta cucumis*. The latter is commonly found on plants in the field producing minute oval spores in round black structures in the leaf called 'pycnidia' that are just visible to the naked eye.

Photo 1. The large black spots are typical of gummy stem blight, *Didymella bryoniae*, on the leaves. Notice the concentration of the spots at the margins of the leaf where water stays for longer. Some of the spots have joined together.

Photo 2. This is typical of the defoliation that occurs with gummy stem blight infection, making it a serious disease. Leaves go yellow, collapse and die when they have only a few spots. The older leaves die first.

Photo 3. Gummy stem blight infection, *Didymella bryoniae,* on a seedling. It is just possible to see the black dots that contain the spores in the centre of the spot. Infection of seedlings in the nursery is a major threat to watermelon production as it means the fungus is taken to the field and early infection and spread is guaranteed.

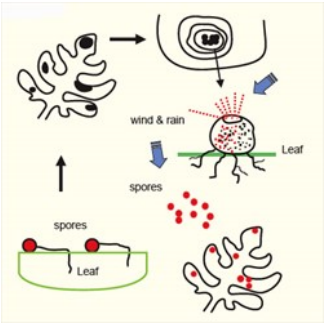

Diagram. Life-cycle of gummy stem blight, *Didymella bryoniae*.

Photo 4. Checking in the nursery for infections of gummy stem blight, *Didymella bryoniae,* on seedlings of watermelon. This should be done at least twice a week. If infections are found, the plants should be removed and burnt. Notice that the nursery is high above ground.

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