Disease Pathogen Name: *Phytophthora parasitica*

Pathogen Type: Fungus

Other Common Names: Aerial Blight on Periwinkles

Period of Primary Occurrence: late spring to early summer

Other Plants Affected
- It also causes significant problems on petunias

Description / Symptoms
- Generally presents as leaf blight and upper stem deterioration (Fig. 1)
- Root tissue typically not involved (aerial in nature, hence the name of the disease)
- Dark brown streaks or blotches appear on the stems followed by wilting of the leaves on those stems (Fig. 6-8)
- Often sections of the plant will wilt and turn gray-brown while other parts remain healthy
- An aerial sunken stem canker can also develop
- Symptoms develop rapidly in outdoor planted beds, especially during prolonged rainy weather
- Severely infected plants may succumb and die (Fig. 3)
- A severe infestation can wipe out an entire planting

Conditions Favoring Disease Development
- In the Galveston-Houston area, planting periwinkles too early (while soil and air temperatures remain cool) is especially favorable to disease development
- Crowded growing conditions which limit air flow and increase humidity
Best Management Practices (BMP)

NON-CHEMICAL CONTROL
- Emphasis for control of aerial blight disease is placed on providing good drainage and water management
- Select a full-sun location; periwinkles need at least 6 – 8 hours of direct sun for optimum performance
- Avoid excessive soil compaction when transplanting. Soil compaction reduces needed air space and can significantly reduce drainage
- Avoid excessive drought as well as excessive irrigation. Stress from either factor can weaken plant roots and predispose them to infection
- Plant in raised, well draining bed
- Do not plant periwinkles before mid-April
- Plant so that the top of root ball is level with or slightly higher than the soil
- Do not crowd plants; good air circulation is needed
- Mulch to decrease splashing of rainfall and irrigation water
- Do not overwater
- Avoid overhead watering if possible
- Prune infected twig/branch/shoot tissue from infected plants as soon as symptoms become visible
- Do not plant periwinkles in the same location year after year or in a location affected by the disease in the past
- Plant resistant varieties

CHEMICAL CONTROL
- Use a fungicide labeled for control of aerial Phytophthora on periwinkles, and repeat treatments as directed/required

FIG. 5

FIG. 6

FIG. 7

FIG. 8