Wisconsin Horticulture Update
2013

Impatiens Downy Mildew

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Wisconsin Horticulture Update

Impatiens Downy Mildew

• Causes
  – Plasmopara obducens
  – Bremiella sphaerosperma

• Hosts
  – Standard garden impatiens (I. walleriana)
  – Balsam impatiens (I. balsamina)
  – Jewelweed (I. pallida, I. capensis)
  – New Guinea impatiens (I. hawkeri) (resistant/tolerant)

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Impatiens Downy Mildew

• Geographical Distribution
  – Worldwide
  – Wherever impatiens are grown

• Survival
  – Infected plants
  – Soil or potting mixes
  – Seeds

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Impatiens Downy Mildew

• Movement
  – Infected plants
  – Seed
  – Wind-borne sporangia

• Favorable Environment
  – Cool conditions (59 - 73°F)
  – Long leaf wetness periods (> 6 hrs)
  – High humidity
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**Impatiens Downy Mildew**

- **Control**
  - Start with clean seed and transplants
  - Keep materials from different sources physically separated
  - DO NOT overcrowd plants (i.e., reduce humidity)
  - DO NOT overhead water (i.e., limit leaf wetness periods)
  - Scout frequently

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**Impatiens Downy Mildew**

- **Control**
  - Obtain proper confirmation of the disease
  - Bag and discard affected plants
    - Symptomatic plants
    - Asymptomatic surrounding plants
  - Disinfest contaminated areas
    - Commercial disinfectants
    - 10% bleach
    - 70% alcohol

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**Impatiens Downy Mildew**

- **Control**
  - Use fungicides to prevent infections
    - mefenoxam, fluopicolide, potassium phosphite, mancozeb, pyraclostrobin + boscalid, fluoxastobin, cyazofamid, dimethomorph, fenamidone, azoxystrobin
    - Alternate active ingredients
      (http://www.frac.info/frac/publication/anhang/FRAC_CODE_LIST.pdf)
    - Apply at 7 day application intervals
  - Move (i.e., rotate) impatiens production

**Plant Diseases Where to Go for Help**

**Plant Disease Diagnostics Clinic**
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