

Special Sunflower Topic: Diseases of the head

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What you will learn today!

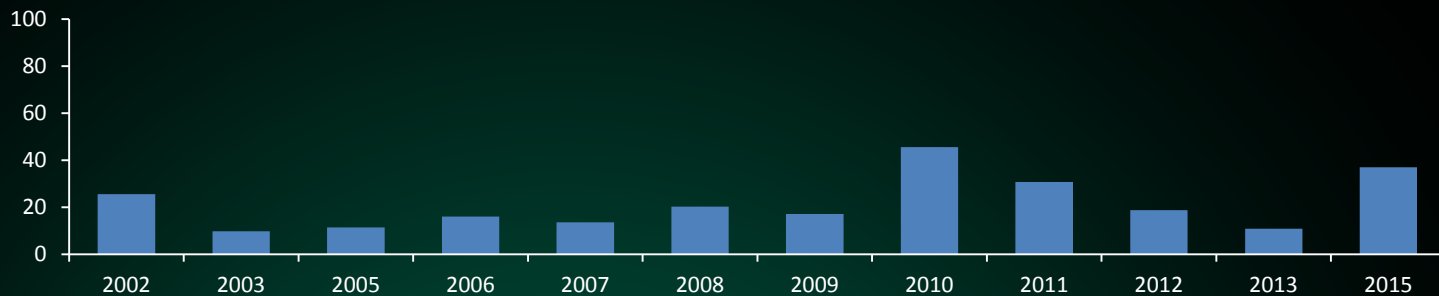
- Two main diseases
 - Rhizopus Head Rot
 - Sclerotinia Head Rot
- Prevalence, Biology, Symptoms and Management
- A look forward



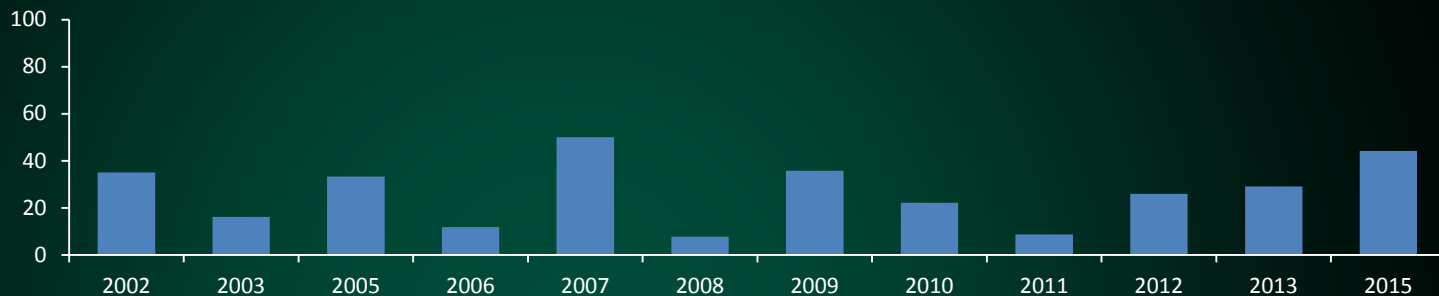
Rhizopus Head Rot

Rhizopus Head Rot – Prevalence

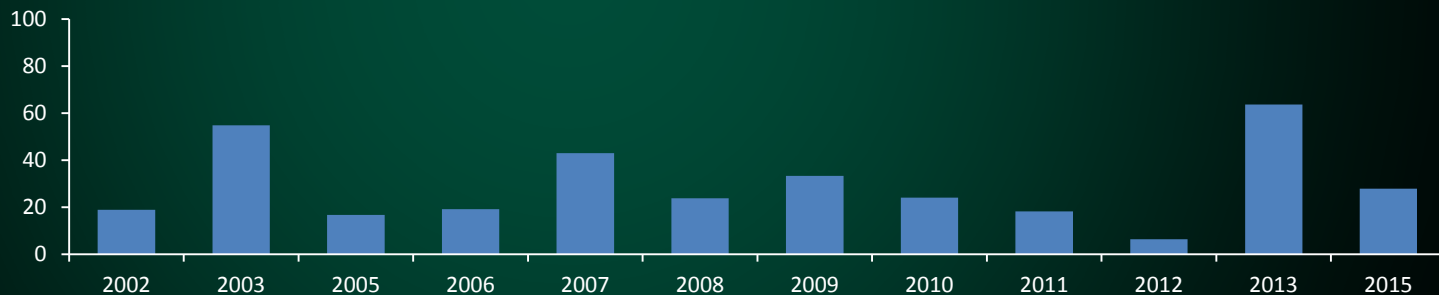
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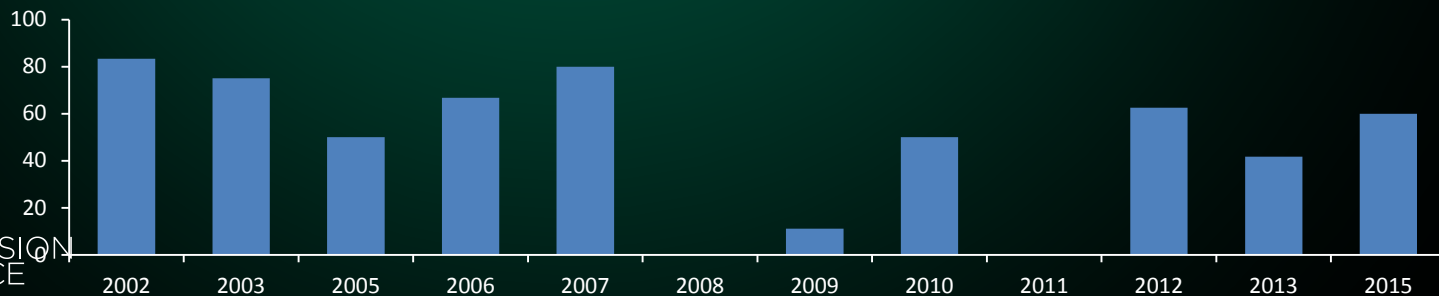
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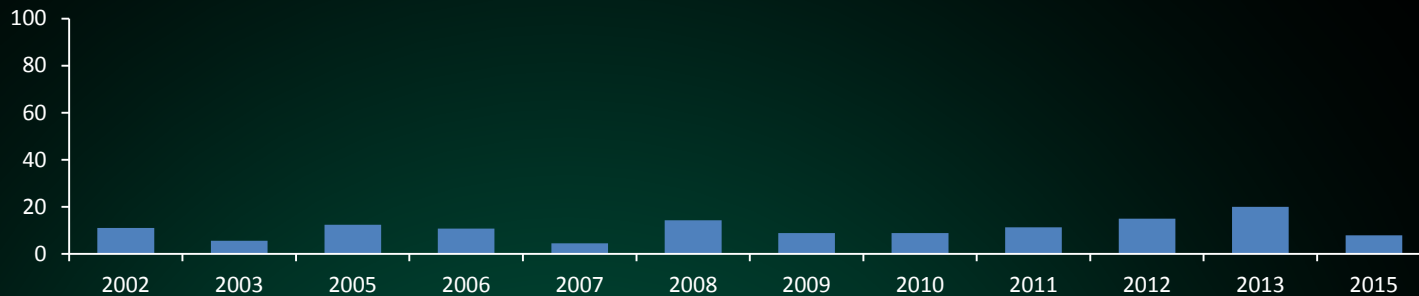


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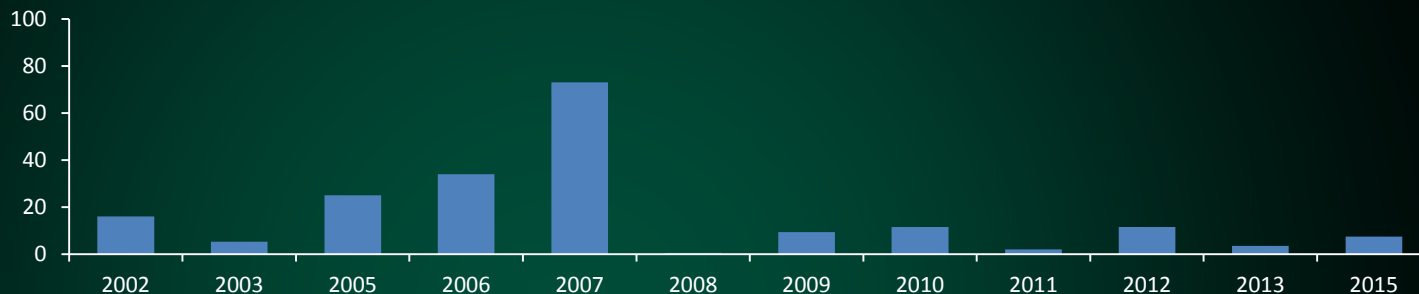


Rhizopus Head Rot – Field Incidence

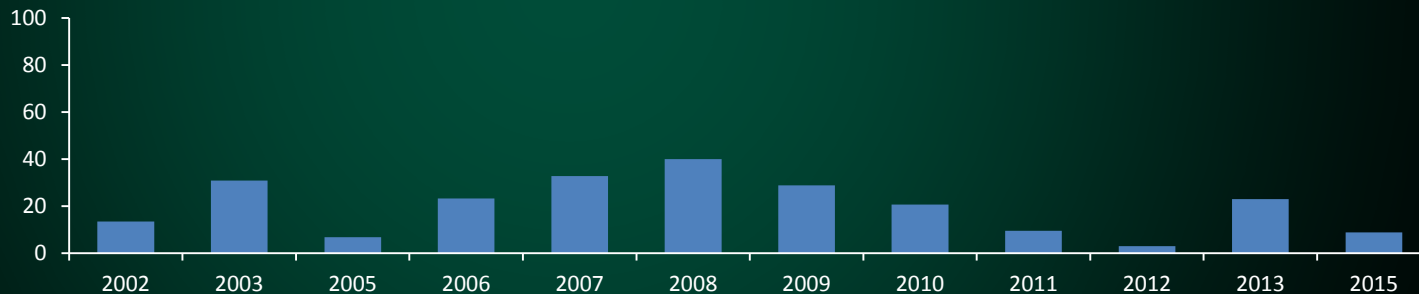
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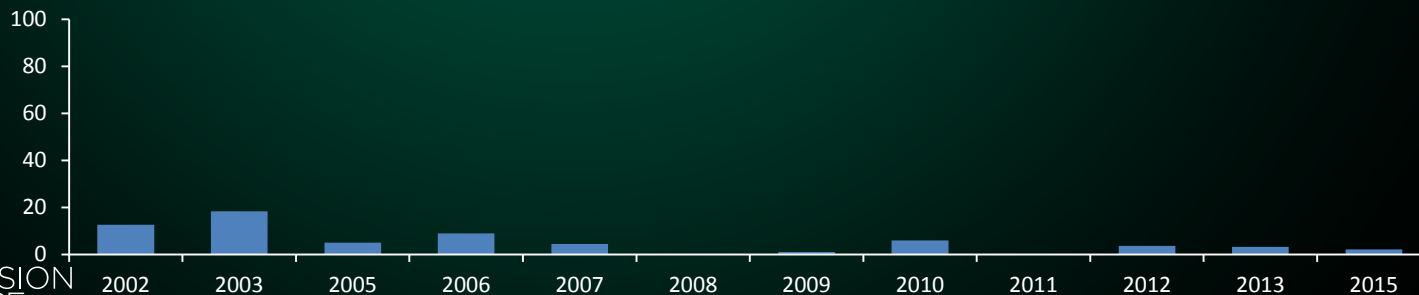
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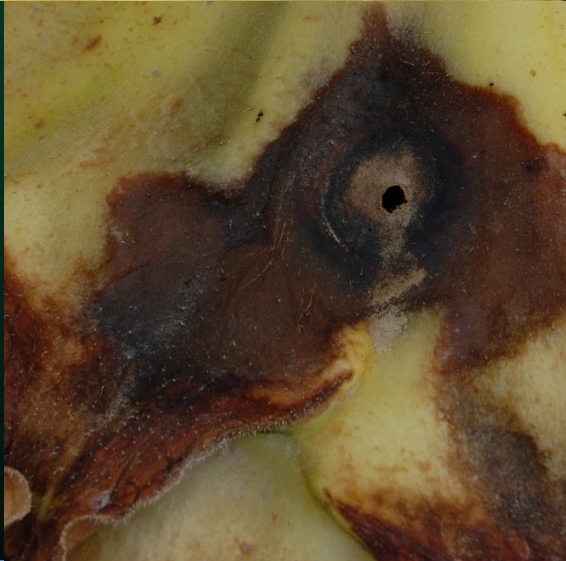


Rhizopus Head Rot

- Pathogen
 - *Rhizopus arrhizus*, *R. stolonifer*, and *R. microsporus*
- Life Cycle and Infection
 - Overwinters in soils as sporangia and opportunistically infects through wounds under conditions of high humidity

Symptoms

- Dark spots on back of ripening heads
- Watery soft rot that turns dark with age
- Heads dry prematurely, shrivel, and become shredded
- Grayish, fuzzy fungal growth seen on flower side of head



Rhizopus Head Rot











Rhizopus Head Rot Management

- No good chemical control measures available
- Controlling head moth infestations
- Avoid mechanical wounding after flowering
- Control volunteer or wild sunflowers
- Upright cultivars more susceptible

Possible Avenues of Research

- Quantify damage due to Rhizopus?
- Wounding – inoculation methods are available
- Chemical control?