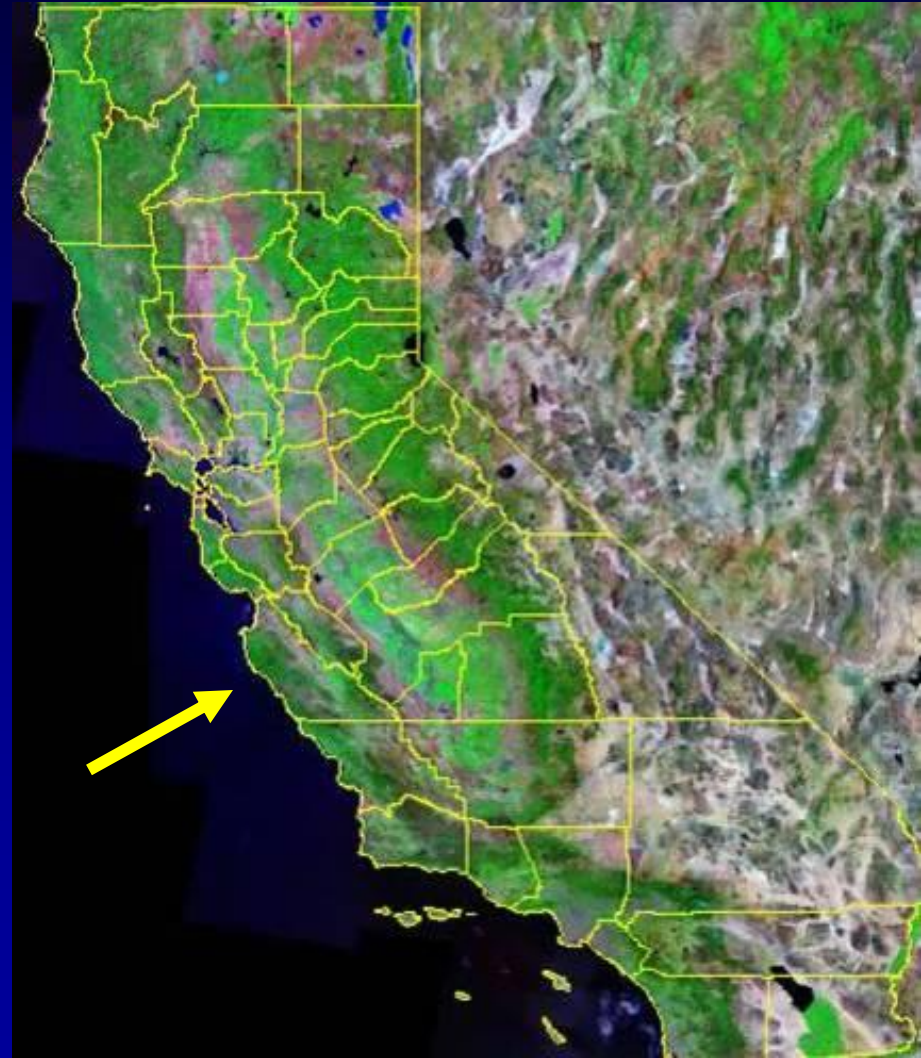


Diseases of Coastal Vegetable Crops: Updates and Developments

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Cooperative Extension
Monterey County



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Artichoke
Arugula
Asparagus
Basil
Bean
Beet
Bok choy
Broccoli
Brussels spts.
Cabbage
Carrot
Cauliflower
Celery
Chickpea
Chinese cabbage

Cilantro
Corn salad
Cucumber
Endive
Escarole
Fava bean
Fennel
Garlic
Kale
Leafy mustards
Leek
Lettuce
Mint
Onion
Parsley

Pea
Pepper
Radicchio
Radish
Rappini
Spinach
Squash
Swiss chard
Tomatillo
Tomato
Blackberry
Blueberry
Grape
Raspberry
Strawberry

Salinas Valley: Proliferation of new DM races

A horizontal timeline on a black background. A red line with an arrow at the end represents the timeline. Above the line, race identifiers are placed: R2, R3, R4, R5, R6, R7, R9, R10, R11, R12, R13, and R14. R14 is highlighted in blue. Below the line, the text 'Spinach downy mildew races' is on the left. Years are marked below the line: 1990 (under R4), '08 (under R11), '09 (under R12), '10 (under R13), and '12 (under R14).





Phytophthora

Fusarium oxysporum





Rhizoctonia solani













Impatiens necrotic spot virus





INSV: recent, new CA reports:
Lettuce, Basil, Celery,
Endive, Faba bean, Pepper,
Radicchio, Spinach, Tomato



TBSV / LNSV



TSWV





TSWV



IYSV



IYSV



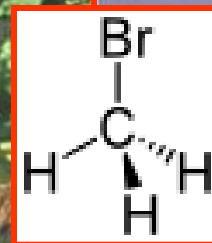
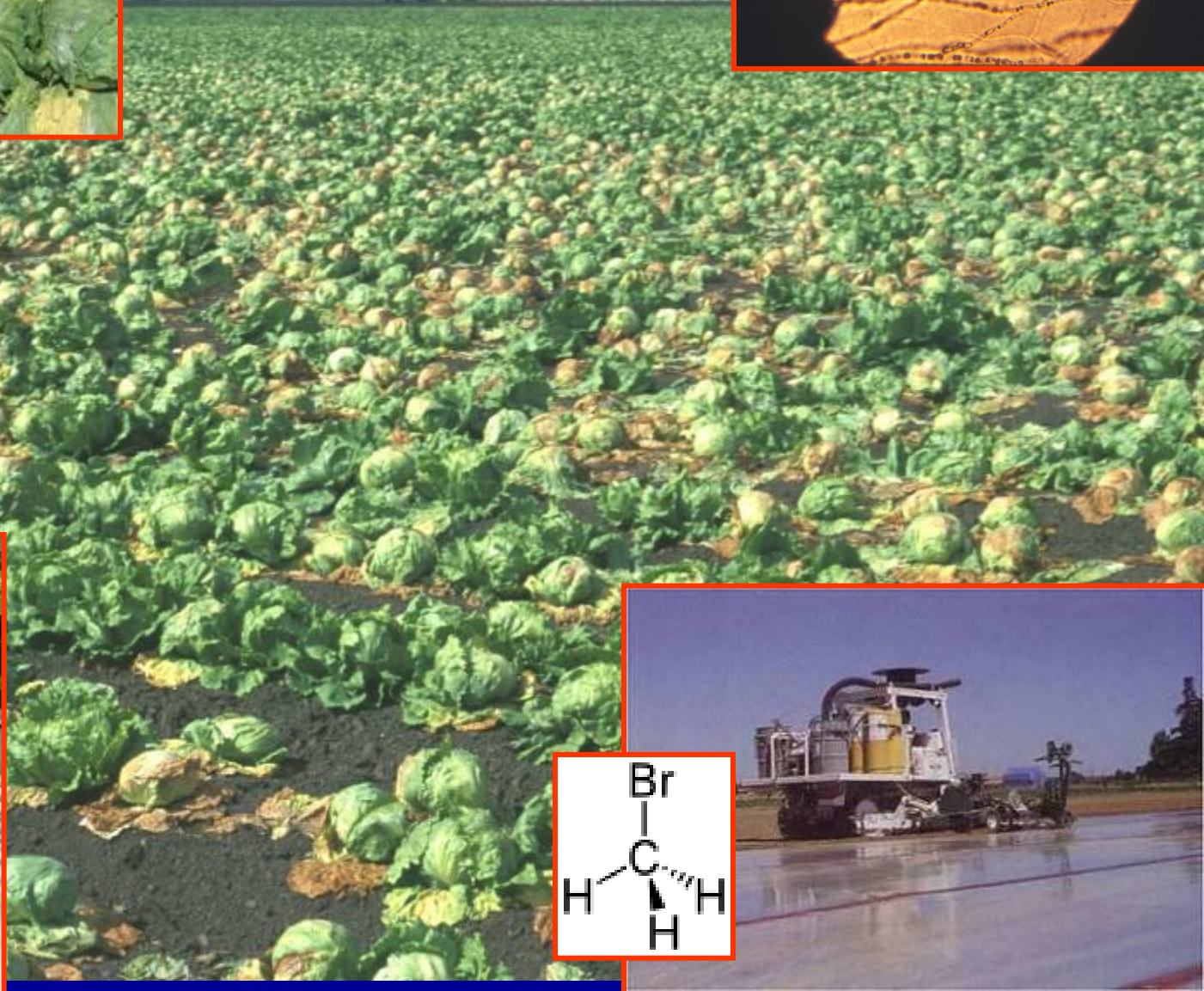
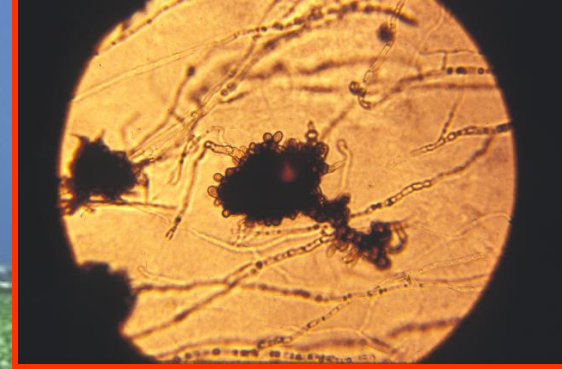


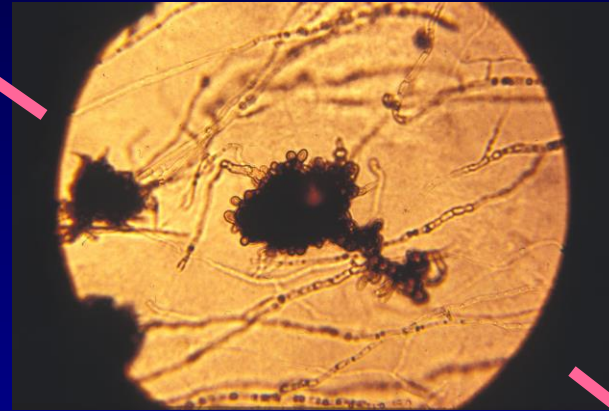
Verticillium wilt



Fusarium wilt

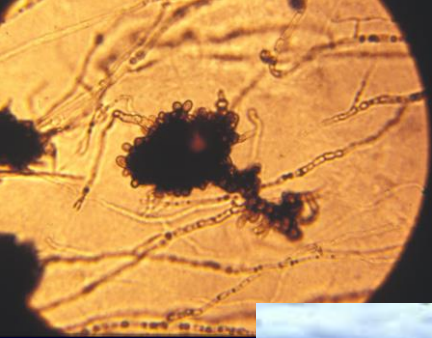






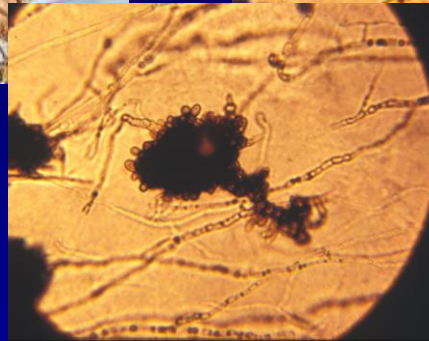
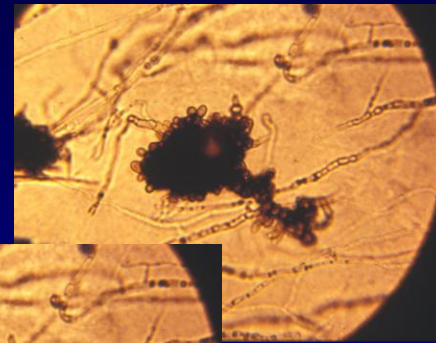
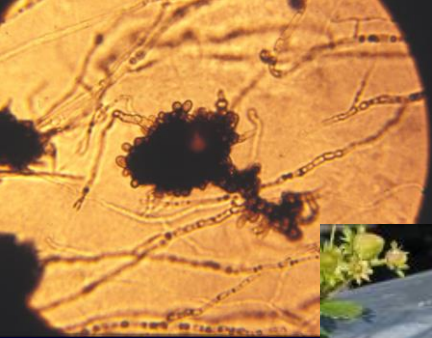
Verticillium in soil

**MeBr + CP
flat fume, tarpped**

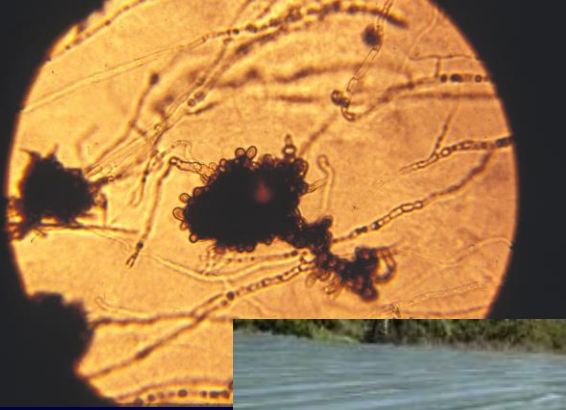


Verticillium in soil

~~MeBr + CP~~
~~flat fume, tarpped~~
(2015)

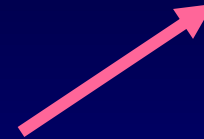


**Bed fumigation w/ alternatives:
straight chloropicrin
chloropicrin + Telone**





Seedborne *V. dahliae* on spinach seed



?

Spinach seeding rate:
3 to 5 million seed/A









Two root rot diseases of lettuce

- Black root rot
 - *Thielaviopsis basicola*
- Pythium root rot
 - *Pythium uncinulatum*

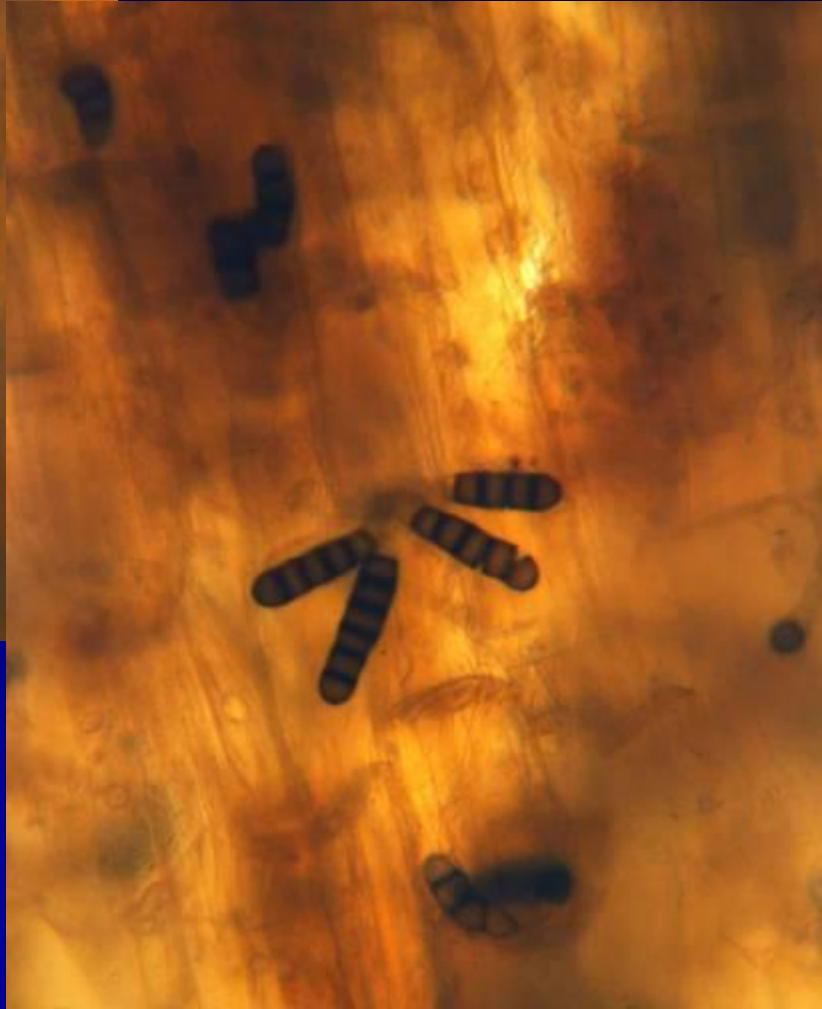
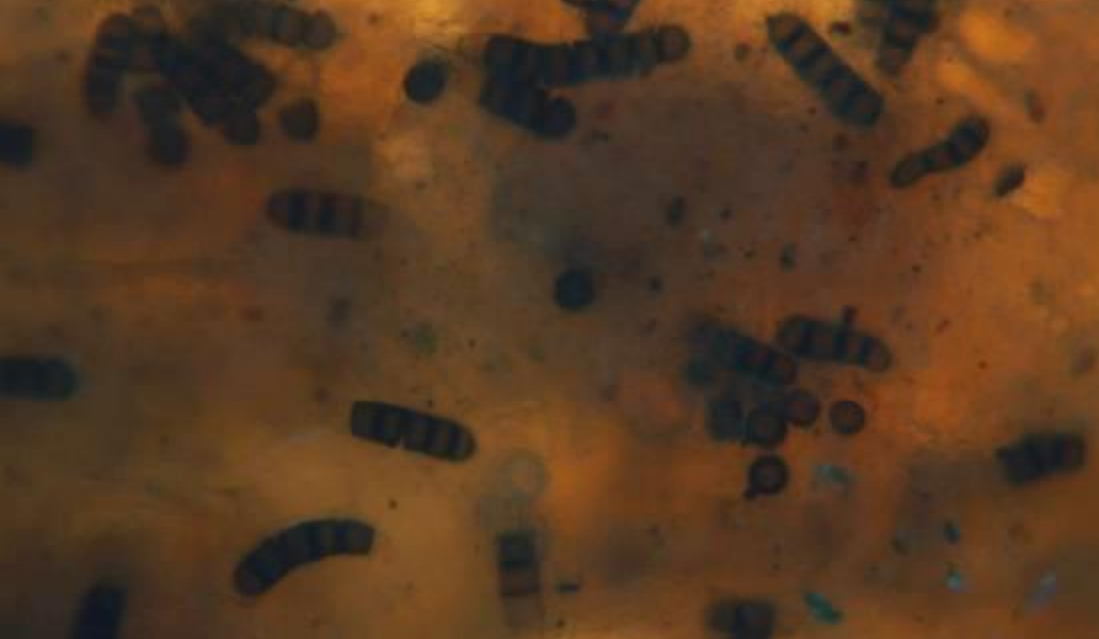








Thielaviopsis on lettuce









Pythium uncinulatum



Embellisia



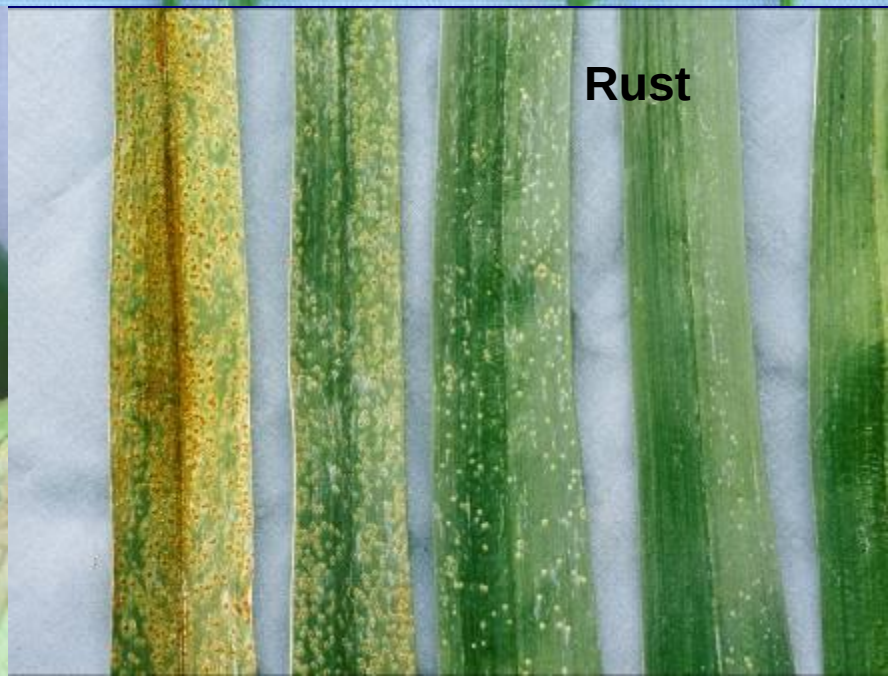
Chervil pm



TuMV



Rust





F. oxysporum



Peronospora



Verticillium



ApVY



Stemphylium (s)



Pseudomonas (s)



Pseudomonas (s)



Septoria (s)



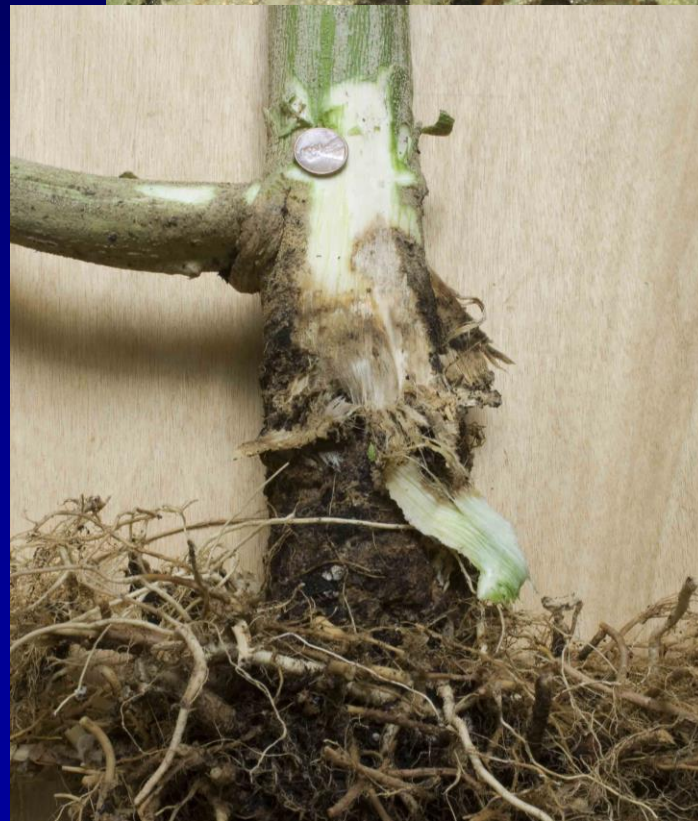
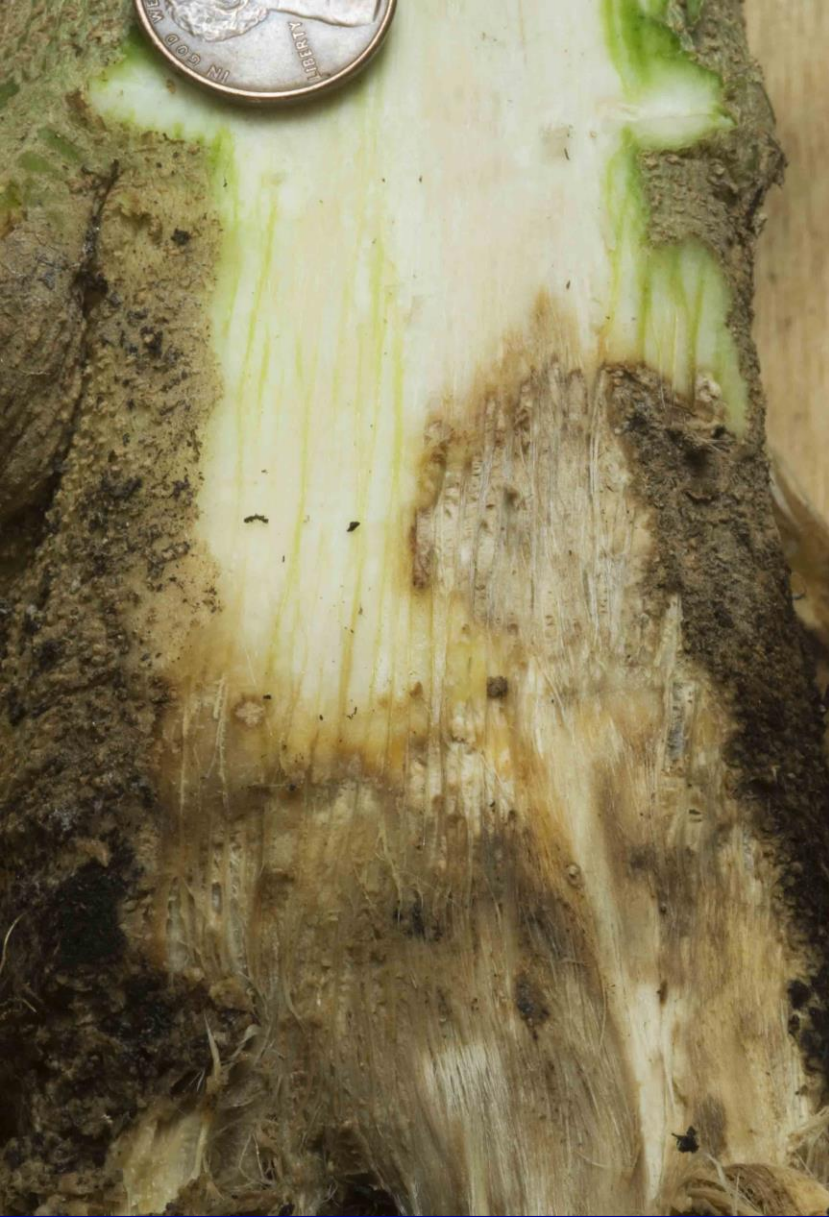
Cercosporidium (s)



**Fusarium
avenaceum**



P. syringae (s)





Truly a cash crop

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