

Salahaddin University \Erbil
College of Agriculture
Field crop Department
4th class



Field crop diseases \ Practical 4th lab.

Wheat and barley diseases

Assist lecturer:

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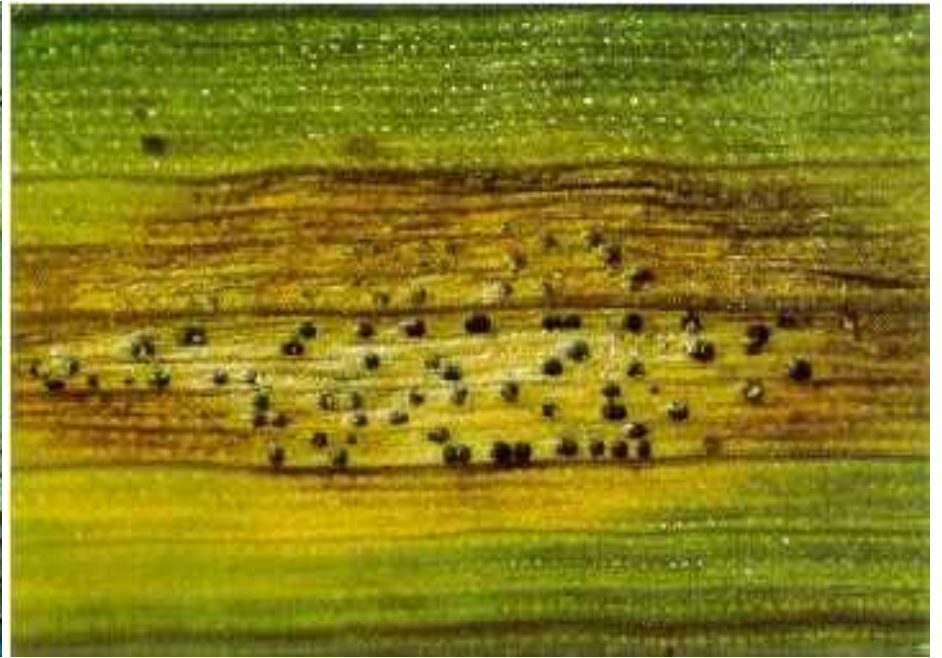
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Outlines

- Septoria leaf spot
- Net blotch
- Wheat Streak Mosaic Virus
- Barley Yellow Dwarf Virus
- Root lesion nematode

Septoria Leaf Spot



Hosts :wheat

Pathogen:*Septoria tritici*

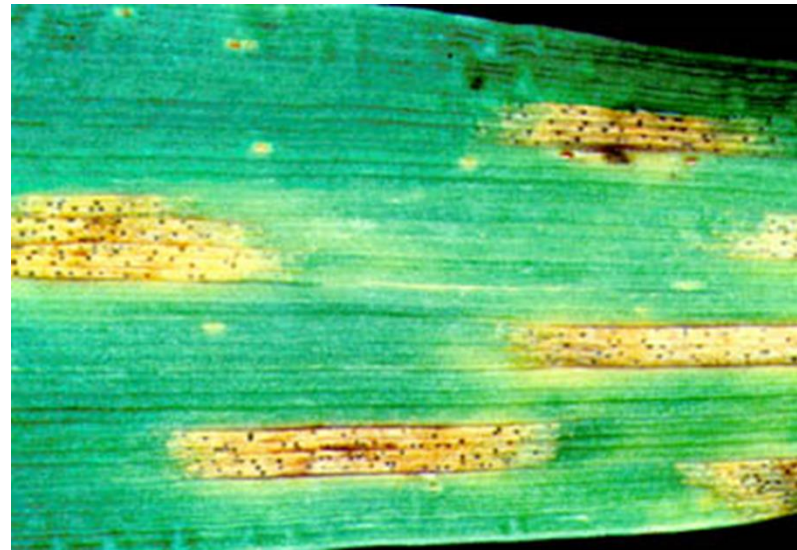
Hosts:barley

Septoria passerinii

Symptoms:

1- Chlorotic (yellow) water-soaked flecks becoming dry, yellow, then red-brown lesions.

2- lesions are blocky with tiny black specks (pycnidia) visible in rows in mature lesions



Inoculum Survival: Infected residues,
seed, some grassy weed hosts.

Inoculum Dispersal: Airborne spores.

Net Blotch

Pathogen : (*Pyrenophora teres*)



Symptoms:

A characteristic "netting" of the dark, chocolate-colored blotches on leaves, sheaths and glumes.



Wheat Streak Mosaic Virus (WSMV)



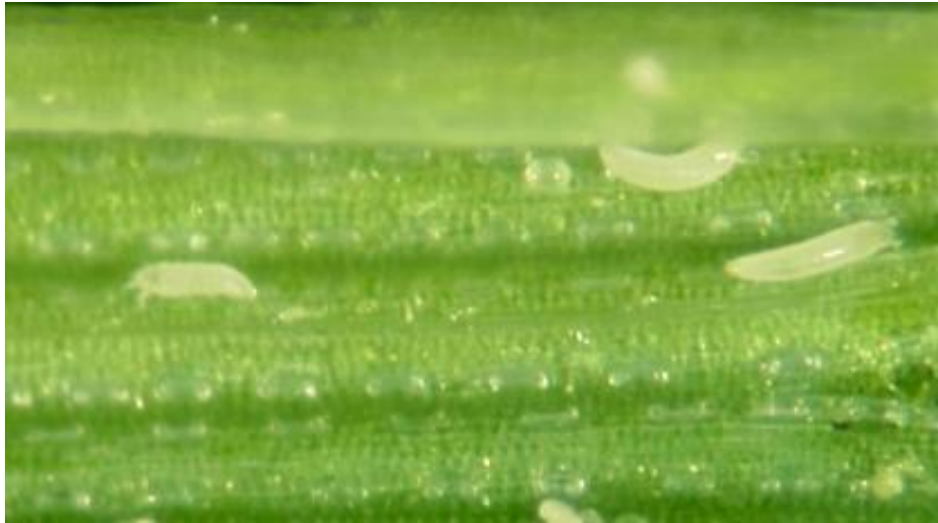
Hosts: wheat is the preferred host , same grass hosts.

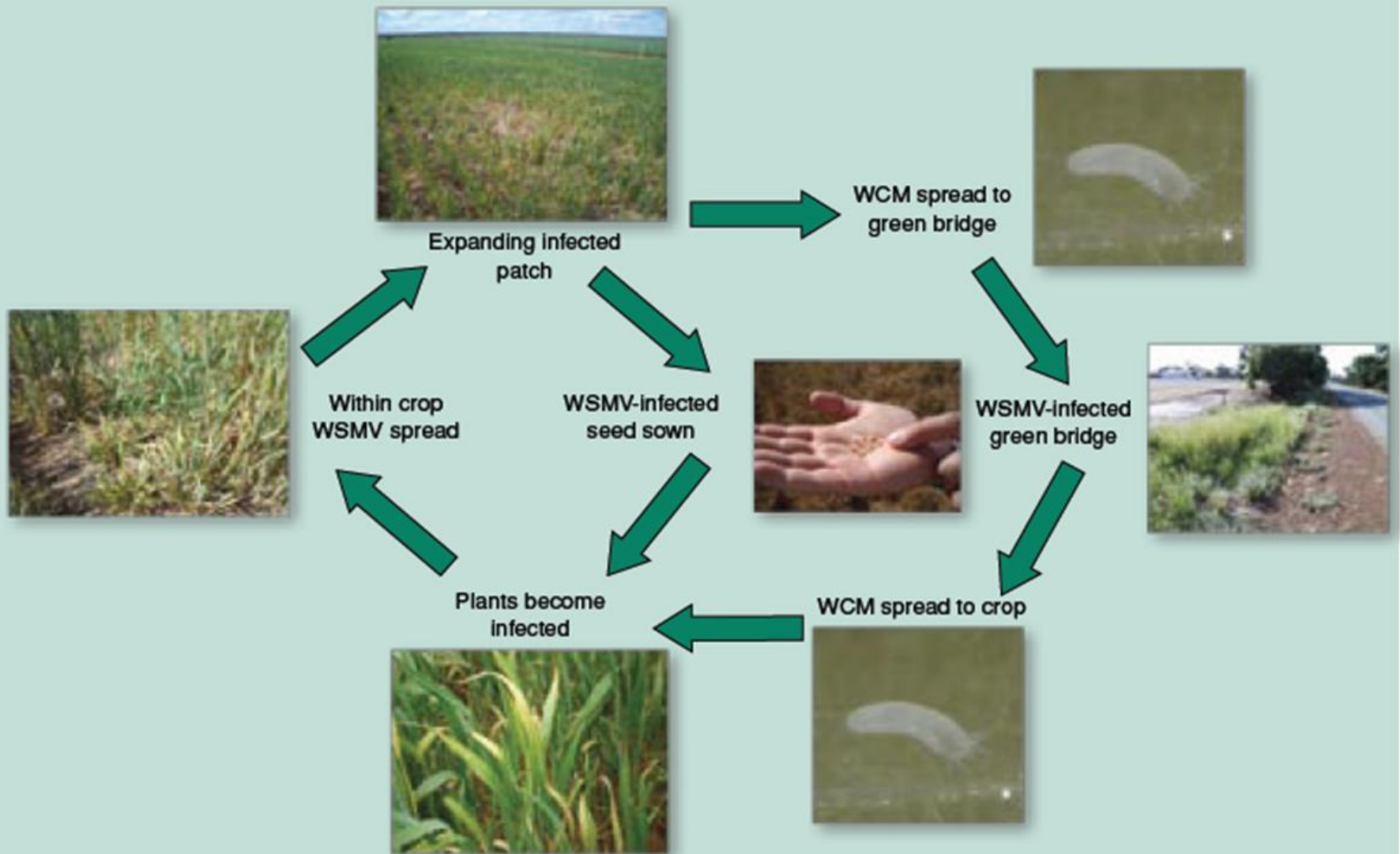


How Does the Disease Spread?

1-The mites, They merely carry the virus from diseased to healthy plants.

2- seed contamination.





Disease Symptoms

1-The virus causes yellowing and mosaic streaking of the leaves.

2-stunting of the plant

3- potentially large yield losses.



Barley Yellow Dwarf VirusBYDV



Hosts: Barley, spring wheat, oat.



The virus is transmitted by several species of aphids.



Symptoms:

Bright yellow chlorosis shows first on the tips and margins of older leaves.

Other symptoms may include:

- 1- stunting,
- 2- reduced kernel size and weight, sterility.
- 4- failure of heads to emerge.



Root lesion nematodes

pathogen: *Pratylenchus thornei*

Pratylenchus neglectus



Symptoms

Damage from root lesion nematodes can be easily mistaken for nutrient deficiencies, root rot diseases and drought.



Nematode affected plants display stunting, yellowing of older leaves, reduced growth and loss in kernel weight.

