



CORN



MANITOBA  
CROP  
ALLIANCE

# DISEASE DIAGNOSIS

## SMUT & LEAF DISEASES



### COMMON SMUT

Conspicuous swellings or galls on cob tissues or kernels

Interior of galls darkens and ruptures, releasing masses of powdery dark brown to black spores

Leaf galls appear more blister-like and do not rupture



PHOTOS: MORGAN COTT, MANITOBA CROP ALLIANCE



PHOTO: MORGAN COTT, MANITOBA CROP ALLIANCE

### HEAD SMUT

Not visible until tassel and ears develop

Cobs usually replaced by mass of black spores enclosed completely by husks

When tassel is infected, ear will also be infected, but not necessarily vice versa



PHOTO: MORGAN COTT, MANITOBA CROP ALLIANCE

### COMMON RUST

Golden brown blisters on leaves

As disease progresses, blisters split open and release characteristic powdery, rust-coloured spores

Does not normally develop until late in the growing season and is relatively minor

CORN







PHOTOS: VIKRAM BISHT, MANITOBA AGRICULTURE AND RESOURCE DEVELOPMENT

### CRAZY TOP/ DOWNY MILDEW

Infected plants are stunted, crooked and produce abundant tillers  
Tassel often replaced with mass of twisted leaf tillers



PHOTO: ALISON ROBERTSON, IOWA STATE UNIVERSITY

### ANTHRACNOSE LEAF BLIGHT

Large, oval spots (up to 15 mm in diameter) with tan centres and reddish-brown or yellowish margins

Infection occurs on lower leaves first, spreading to upper leaves under wet conditions

Infected leaves wither and die prematurely



PHOTOS: MORGAN COTT, MANITOBA CROP ALLIANCE

### GOSS'S WILT

Initially, lesions appear as water-soaked streaks

Lesions develop long, greyish wavy pattern following the leaf veins

Within lesions, irregular, water-soaked dark green to black "freckles" develop – a distinct symptom of Goss's wilt

Sticky exudate develops within the lesions after a rain event or in high humidity and appears shiny after drying

Systemic infection, which occurs earlier in development, results in discoloured xylem tissue and wet, slimy bacterial exudate within the stalk tissues

Following systemic infection, plants may be stunted, become wilted and die



**MANITOBA  
CROP  
ALLIANCE**

### CONNECT WITH US

[mbcropalliance.ca](http://mbcropalliance.ca)

[hello@mbcropalliance.ca](mailto:hello@mbcropalliance.ca)

P: 204.745.6661



@mb\_cropalliance