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AG ROUNDUP

September - October, 2024

M.D. of Provost

COMMUNITY EVENTS

Provost Farmer's Market

- September 6, 13/10-2 Agriplex
- October 11 Pumpkin Fest/11-7 Agriplex

Amisk Fall Festival

- September 28
- Market 2-5pm Curling Rink

Metiskow Trail Ride

- September 21, 2024, Pre-register by September 16
- Trail Ride: $35/rider includes supper, $20/rider no supper,
- Steak Supper: Adult $25/plate, Age 12-8 $15/plate, 7 and Under Free
- Wilma (780)753-0785 or wilma_halvorson@hotmail.com

IN THIS ISSUE

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SCLEROTINIA STEM ROT OF CANOLA

Sclerotinia stem rot is caused by soil-borne fungus Sclerotinia sclerotiorum. This fungal pathogen is found in most parts of the world and has a large host range that includes >400 plant species in 75 broadleaf plant families. Sclerotinia diseases are widespread and favour moist conditions and dense crop canopies, causing damage to crops in the field and in storage.

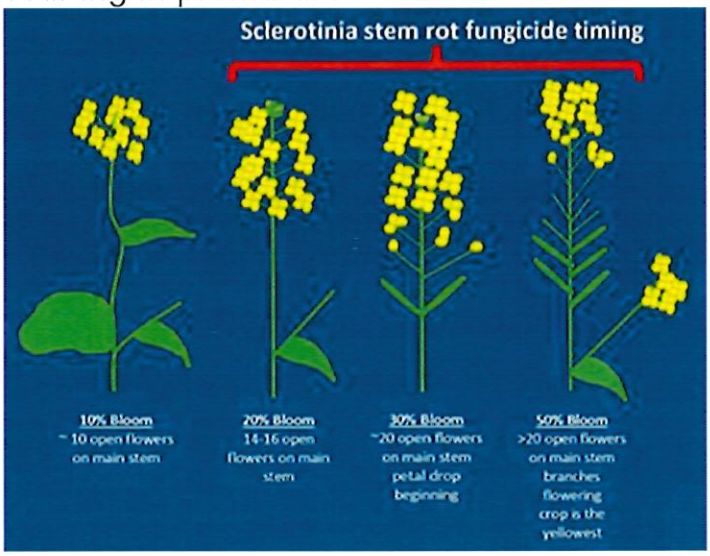
Sclerotinia stem rot symptoms on canola

formation of sclerotia on the stem

In canola, yield losses due to sclerotinia stem rot vary from year to year, as the disease is greatly influenced by environmental conditions. If high inoculum levels are present and the crop canopy is dense, sclerotinia stem rot can cause >50% crop yield loss.

Initial symptoms of sclerotinia stem rot appear as soft, water-soaked white-grey lesions on leaves/stems. As lesions advance they may resemble a "bull's eye" pattern of concentric rings of rotting tissue. White mould growth may be evident and spread from plant to plant via direct contact. Plant parts above the affected area will often turn pale green or yellow, wilt and eventually die. Mature lesions are bleached and are easily shredded resulting in premature ripening, stem collapse and lodging. Sclerotia are often evident inside the infected stems, or external to the infected stems in some crop types.

Sclerotinia infection may be observed as individual plants scattered throughout the field, or in moist patches in the field such as in hollows or nitrogen-rich areas. Lodged crops are more susceptible to sclerotinia infection. Rotting of stored crops continues under damp, confined conditions. Pockets of rot result in complete destruction of the stored crop and the rot will continue to spread. Sclerotinia rot on vegetables does not produce an odour unless other secondary rotting organisms further decompose the tissues.



CLUBROOT DISEASE OF CANOLA AND MUSTARD

Clubroot is a serious soil-borne disease of cruciferous crops (canola and cabbage family) worldwide and was first identified in Europe in the thirteenth century.

THE APA

Clubroot was added as a declared pest to Alberta's Agricultural Pests Act (APA) in April 2007. The APA is the legislative authority for the enforcement of control measures for declared pests in Alberta.

ENFORCEMENT

Enforcement of pest control measures is the responsibility of the municipal authority, and Agricultural Fieldmen are responsible for enforcing pest control measures in their municipality.

INSPECTIONS

Pest inspectors have the power to enter land at a reasonable hour, without permission, to inspect for clubroot and collect samples.

RESPONSIBILITY

The owner or occupant of land has the responsibility for taking measures to prevent the establishment and spread of clubroot.

SUSCEPTIBLE PLANTS

Clubroot can affect canola/rapeseed, mustard, broccoli, brussels sprouts, cabbage, cauliflower, Chinese cabbage, kale, kohlrabi, radish, rutabaga and turnip. Cruciferous weeds are susceptible as well (ex: Stinkweed and Shepherd's Purse)

OUR PLAN

MD Employees will be conducting surveys throughout the MD. This just means we will be pulling plants to look at the roots and potentially keeping some to send away for testing. Our employees will disinfect their shoes, hands, tires... anything that comes into contact with the soil!

WHAT'S THAT PLANT?
YELLOW SWEET CLOVER
MELILOTUS OFFICINALIS
FABACEAE FAMILY

***Melilotus officinalis*, known as sweet yellow clover, yellow melilot, ribbed melilot and common melilot, is a species of legume native to Eurasia and introduced in North America, Africa, and Australia.**

Plant Characteristics

Duration: Biennial
Habit: Herb
Leaf Retention:
Fruit Type: Pods typically containing one seed
Size Notes: 120–180 centimeters (4–6 ft) high at maturity
Leaf: Alternate on the stem and possess three leaflets

Bloom Information

Bloom Color: Yellow first then fade to white
Bloom Time: Spring and Summer

Growing Conditions

Water Use: Can tolerate cold temps and drought but not standing water
Light Requirement: Sun, Part Shade
Soil Moisture: Moderate
Soil pH: >5.5
CaCO3 Tolerance: Low
Soil Description: Calcareous loamy and clay soils
Comments: Sweet clover contains coumarin that converts to dicoumarol, which is a powerful anticoagulant toxin, when the plant becomes moldy. This can lead to bleeding diseases (internal hemorrhaging) and death in cattle. Consequently, hay containing the plant must be properly dried and cured, especially in wet environments.

Uses

Seeds are eaten by game birds. Can be used as livestock feed when properly cured. Major source of nectar for honey bees. Can treat soils contaminated with dioxins. Can be used in some rodenticides.

PLANT THESE INSTEAD

OXEYE DAISY

Leucanthemum vulgare

NOXIOUS

Perennial plant introduced as a pond ornamental. Pale yellow flowers. Has tuberous roots and reproduces by seed and fast-moving rhizomes. Forms dense thickets which increase sedimentation and completely changes the habitat. *(Caution: Oxeye Daisy seeds are often found in Wildflower mixes)*

NATIVE & ORNAMENTAL ALTERNATIVES

Alpine Aster

Aster alpinus

Branching stems, single daisy-shaped, clear white, yellow-eyed flowers on low clumps of bright green leaves. Blooms in late spring/ early summer. Grow in rock gardens or used for edging. Self-seeds to produce successive generations. Zone 3

Ht. 20-30 cm; W. spreading

White Swan Coneflower

Echinacea purpurea 'White Swan'

A white-flowered variety of the common purple coneflower. The 8 cm diameter flowers have white rays and coppery conical centers on long stems making them ideal cut flowers. Blooms profusely all summer long and is perfect for beds, borders, and naturalized areas. Drought, deer, heat, humidity, and poor soil tolerant. Zone 3

Ht. 60-90 cm; W. 45-60 cm

Tufted Fleabane

Erigeron caespitosus

A single plant will produce numerous white or light pink daisy-like flowers in groups of 1-4 at the ends of upper branches. Foliage and stems are covered with stiff hairs. Drought and heat tolerant. Great for rock gardens and dry sunny garden beds. Zone 3

Ht. 8-30 cm; W. 12-40 cm

ALSO CONSIDER: Biokovo Cranesbill Geranium (2015 Perennial Plant of the Year) (*Geranium × cantabrigiense* 'Biokovo') Zone 3; Showy Fleabane (*Erigeron speciosus*) Zone 2; Lance-leaved Tickseed (*Coreopsis lanceolata*) Zone 3

ALBERTA BIRDS
HAWKS

https://www.birdadvisors.com/hawks-alberta/

Hawks are birds of prey and hunt and eat birds and small mammals, snakes, and frogs. They can see ultraviolet light, which helps them hunt down their prey.

RED TAILED HAWK

In summer, Red-tailed Hawks are the most frequently spotted hawks in Alberta and appear in 15% of checklists submitted by bird watchers.

They are migratory birds and are seen in the province for the breeding season, mostly from April to September, then they fly south for winter.

As their name suggests, Red-tailed Hawks have a distinctive short, wide red tail. They are large, with broad, rounded wings. Most Red-tailed Hawks are brown on the back and pale underneath.

They are also the easiest to spot, often on long car journeys, as they circle slowly over open fields looking for prey such as small mammals, birds, and reptiles. You can also see them perched on telephone poles.

SWAINSON'S HAWK

In summer, Swainson's Hawks are the second most frequently spotted hawks in Alberta and appear in 12% of checklists.

They are also migratory birds that spend the breeding season in Alberta, from April to October, then fly south for winter.

Swainson's Hawks are long-winged hawks with short tails and pointed wingtips. They are usually brown or gray mottled on the back and with lighter bellies and brown or red chests.

When in flight, you can see the contrast between the black flight feathers on the lower edges of the wings and tips and the white upper part of the wing (called the linings).

NORTHERN HARRIER

In summer, Northern Harriers are the third most frequently spotted hawks in Alberta, where they spend their breeding season. They are more commonly seen from March to November and are recorded in 6% of summer checklists.

Northern Harriers are slender with long broad wings and are between the size of a crow and a goose. They often fly with the tips of their wings higher than their bodies in a v-shape.

Females are brown, and males are gray above and white below, and they have a white rump patch.

Stuffed Mushrooms

40 Large Fresh Mushrooms

Filling:

1 - 8 oz package cream cheese
2 tsp. chopped onion
shredded cheese
1 can flakes of ham or crab meat
1 toe garlic, minced
1/4 cup butter

Mix first four ingredients to a smooth consistency. Put filling in fresh whole mushroom caps. Put butter in baking sheet and place filled mushrooms in baking sheet. Sprinkle shredded cheese on each mushroom. Broil for 10-15 min until cheese browns slightly. Allow a few minutes to cool and serve