February 2021



Have an interesting topic you want discussed in the newsletter or municipal meeting? Send suggestions to Asst. Agricultural Fieldman Tanis Ponath , asb@mdwainwright.ca or call 780-842-4454.

The Blue Book, a popular annual update of information on herbicides. insecticides, fungicides and seed treatments is now being published by Alberta's four crop commissions. Renamed the Crop Protection Guide, a new edition of the guide should be available by mid-March 2021. Fo further information, visit albertawheat.com or albertabluebook.com.

Municipal District of Wainwright No.61

The Municipal Agricultural Connection



Partners in Rural Conservation www.mdwainwright.ca



Ornamental Invasive Species

1. <u>Asian Longhorn Beetle</u>: Native to China the Asian Longhorn Beetle mainly attacks maples; however, it can also attack other trees such as poplar, birch, willow and elm. It has no natural enemies. To date, the invasive species has only been detected in Ontario.



- <u>Emerald Ash Borer</u>: The Emerald Ash Borer is native to China, Japan, Taiwan, Korea, Mongolia and the east part of Russia. This invasive pest has been detected throughout southwestern Ontario, Quebec and one known case was found in Manitoba in 2017. The Emerald Ash Borer attack green, white, black, pumpkin and blue ash. Adults feed on the foliage however, it is the larvae feeding between the bark and sapwood that results in the death of the tree.
- Elm Bark Beetle: The Elm Bark Beetle is responsible for Dutch Elm Disease (DED). DED is caused by a fungus spread by the Elm Bark Beetle that clogs the elms trees water conducting system, causing the leaves to wilt and the tree to die, normally within 1 or 2 growing seasons. The fungus is spread from tree to tree when beetles move for feeding purposes.
- 4. <u>Redneck Longhorn Beetle</u>: Although the Redneck Longhorn Beetle is not yet known to North America there is a risk of it being introduced here. It can be a serious pest when populations are high, causing yield loss in fruit

trees. There is limited information documented on the pest. In Canada, potential host trees include the *Prunus* spp.

- (cherry, plum, peach and apricot).
- <u>Red Lily Beetle</u>: The Red Lily Beetle has been in Eastern Canada since 1943 but it only was recently was discovered in Calgary. They feed on native and ornamental varieties of lilies. Once they are established, they readily spread to wherever their host plants exist.







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Invasive Crop Species

If you see any of these insects, capture them in a container and freeze. Record where you captured them and contact the Alberta Pest Monitoring Network at <u>bugs.r.us@gov.ab.ca</u>.

Bronzed Blossom Pollen Beetle: The Bronzed Blossom Pollen Beetle feeds on canola, mustards, bittercress, rockcress, wild radish and dogmustard. It is not known to be established in Western Canada; however, there is established populations present in Nova Scotia, PEI and Quebec. Adults lay egg clusters in the developing bud and once the larvae hatch they feed on the flower buds. This feeding can reduce canola production by 70%. (*No photo available*)

Brown Marmorated Stink Bug: Native to Asia, the Brown Marmorated Stink Bug was first introduced to North America in 2001. It has since spread through most of the United States and has been detected in British Columbia, Ontario and Quebec. It is a very serious pest that feeds on more than 100 different plant species. In the Agriculture industry, corn and soybeans are the preferred field crop hosts; however, infestations have been reported in canola, pea, sunflower and cereal crops. The insect will also attack fruit trees, vegetables and many ornamental trees. Plants with fruiting bodies, buds or pods are the most attractive to the adults for feeding and egg laying.



THE M.D. OF WAINWRIGHT PRESENTS

WE'VE GOTTA DO SOMETHING

FACING YOUR FARM TRANSFER FEARS WITH REG SHANDRO

> Lack of succession planning is the biggest threat to your family farm that you can actually control. Next to commodity prices, your transfer plan is the biggest variable in the future of your farm. This talk outlines what you need to discuss when condisdering your succession plan. How to manage the process and who can assist you with designing a plan that is best suited for your family . In 2006 Reg became a qualified Mediator and founded Farmacist Advisory and Mediation Services Inc. Reg has been serving the farming community for over 30 years.

JOIN US VIRTUALLY FOR A LUNCH AND LEARN FEBRUARY 10, 2021 FROM 12:00 P.M. - 1:00 P.M.

FOR MORE INFORMATION OR TO REGISTER PLEASE CONTACT ASSISTANT AGRICULTURAL FIELDMAN AT 780-842-4454 OR EMAIL TPONATH@MDWAINWRIGHT.CA



Beetle: Native to mainland Japan, the Japanese Beetle has been detected

Japanese



in Eastern Canada and British Columbia. The Japanese Beetle feeds on the flowers, foliage and fruit of over 250 plant species. This includes landscape plants, ornamental plants, fruit and vegetable gardens, nurseries, orchards and agriculture crops.

Lesser Grain Borer:

The Lesser Grain Borer is one of the most injurious pests known to attack grain. It is found across Canada; however, it is not common in all provinces. Adults and larvae feed on the germ and endosperm reducing kernels to a shell.

Western Bean Cutworm:

The Western Bean Cutworm is native to North America and is an insect pest of corn. This pest





feeds on the corn ear and bean pod.

2020 Insect Survey Results

Each year Agriculture Services staff assists in pest monitoring for Alberta Agriculture and Forestry. The information from these surveys are used to generate forecast maps that help producers with their pest management decision making. All of these pests have the ability to cause significant economic damage.

This year there were 8 Bertha Armyworm sites in the M.D. of Wainwright. All traps were below the first risk level of 300 moths. The population appears to be on the decline; however, it will still be important to maintain the pheromone trap network and to scout your fields because populations could go either way in 2021. The number of moths caught in the pheromone traps indicate the risk of damaging populations 3-5 weeks in advance. Producers can stay up-to-date on the weekly catch numbers by visiting the Alberta Pest Monitoring Network and looking at the live feed maps. Bertha Armyworm populations are normally kept in check by factors such as weather and natural enemies. Depending on the crop conditions and weather, damage can be more or less severe than suggested by the moth count data. Field to field conditions can vary significantly that's why we want to stress the importance of field scouting to make effective pest management decisions.

Diamondback Moth counts were low, the same as they have been in previous years. Generally, Diamondback Moth adults do not overwinter in the prairies. Infestations depend on the adult moths that arrive on wind currents in the spring from southern/western United States or Northern Mexico. There is some evidence that during mild winters some adults may overwinter on the prairies.

Wheat Midge soil samples were taken from 7 fields in the fall after harvest. Wheat Midge is an insect that increases in numbers during wet years. Numbers can drastically vary from field to field and there is no definite way to know exactly the risk in any given field. Wheat Midge larvae was found in 5 of the 7 fields surveyed and 2 of those fields showed

elevated risk.

Canola Flower Midge was surveyed in 8 fields within the M.D. of Wainwright. There was damage identified in 6 of these fields; however, this is not an economic concern at this time.

Pea Leaf Weevil damage was low in the 5 fields selected for survey. At this point they are not an economic concern and insecticide treatments would not be necessary for management.

No Cabbage Seedpod Weevils were found in the fields surveyed. The population in central Alberta has decreased significantly through the past couple of years.

Unfortunately, due to the restrictions surrounding COVID-19 there was no monitoring conducted by Agriculture and Agri-Food Canada for Swede Midge. So far the pheromone traps have not detected any swede midge in the M.D. of Wainwright. Hopefully we can continue to monitor this year.

All of these surveys were able to be completed with help from the M.D. of Wainwright, Alberta Agriculture and the local Agronomists.

Stay tuned for an ad in the paper on what surveys will be completed in 2021.



Insect Forecast Maps - Alberta Agriculture



The Wheat Midge forecast for 2021 shows an increased risk in Wheat Midge populations in central Alberta. The area in central Alberta east of Edmonton has developed into a high risk situation. Producers should consider planting a Wheat Midge tolerant variety and implement other integrated pest management strategies to minimize their risk. Late seeding and above average rainfall in the spring can increase the risk of wheat midge. Field to field variation can vary significantly so it is important for producers to assess their risk based on indicators specific to their farm. There are several factors that influence the overwintering survival rate of the midge. Weather conditions, specifically temperature and moisture will ultimately determine the extent and timing of midge emergence during the growing season. The level of midge damage is determined by the synchrony of Wheat Midge and wheat emergence, and the number of Wheat Midge present.

There were 350 traps deployed across the Province for monitoring in 2020. Bertha Armyworm populations increased in many locations. Trap catches indicated the population increasing in central Alberta. While it is difficult to accurately predict the 2021 numbers it appears an outbreak could be possible in central Alberta. Normally, weather conditions and natural enemies keep populations in check. Potential damage from Bertha Armyworms may be more or less severe than suggested by the moth count data depending on weather, crop conditions and localized population dynamic. An insecticide application is recommended when the larval numbers meet the economic threshold.



The adult grasshopper survey counts gives an indication of the number of individuals capable of reproduction through egg laying. Environmental factors can result in higher or lower actual populations than forecasted. Surveyors in central Alberta were hard pressed to find grasshoppers.

The Bruner's spur-throat grasshopper wasn't recognized as a pest until very recently and this species has been documented as having biennial lifecycles. If the grasshopper populations are following a biennial lifecycle then the grasshopper counts from 2019 indicated that 2020 was a low grasshopper year followed by the potential of higher populations in 2021.



The annual Pea Leaf Weevil survey was completed in late May and early June. The map is based on damage ratings in 237 fields from 58 municipalities. The highest damage ratings were found around the Edmonton area. The Pea Leaf Weevil is now established from southern Alberta through to the Peace region. For producers in areas with a higher surveyed number in 2020 could be at risk for damaging populations in 2021. Research has shown that seed treatment is more effective at reducing losses from the pea leaf weevil than foliar applications.

These forecasts are intended for information and should not take the place of individual field monitoring.