



AGRICULTURAL AND ENVIRONMENTAL SERVICES

TO: Agricultural Service Board
DATE: February 25, 2021
FILE: N/A
SUBJECT: Agricultural Fieldman Report

DIVISION: All

EXECUTIVE SUMMARY:

This report provides updates on Agricultural Services matters since the last update provided on November 25, 2020. The Agricultural Service Board (ASB) should be aware of the following items for County Council consideration.

ADMINISTRATION RECOMMENDATION:

Administration recommends that the Agricultural Fieldman report be received as information in accordance with Option #1.

BACKGROUND:

Since the last meeting of the ASB, the following highlights have taken place within the Agricultural Services section.

DISCUSSION:

1. This will be the final season that 2% liquid strychnine (2% LSC) is available for farmers and ranchers. Health Canada has cancelled the registration of 2% LSC to control Richardson's Ground Squirrels. The product will be phased out: final production of 2% LSC will end March 4, 2021 and the product will be fully banned from use on March 4, 2023. Production of the 2% LSC has been delayed due to the COVID-19 Pandemic and administration has a limited supply available to farmers and ranchers.
2. Alberta Agriculture and Forestry has compiled all of the data from our crop insect surveys for 2020 and the final report is attached. Wheat stem sawfly, wheat midge, bertha armyworm, cabbage seedpod weevil and pea leaf weevil numbers remain low in Rocky View County.
3. Alberta Agriculture and Forestry has suspended the Canadian Agricultural Partnership Environmental Stewardship Producer Program effective January 8, 2021. The program will not be accepting new applications but any application received before the deadline will be kept in a queue until further notice.
4. Administration is researching alternative options for the 2021 Agricultural Tour and Master Farm Family Award. The tour was cancelled in 2020 due to the COVID-19 pandemic and it is uncertain if gatherings will be permitted for this year's tour, which usually takes place in July. Administration is looking into options such as a virtual tour or video demonstrations to show case some of Rocky View County's agricultural producers and businesses.
5. In May 2021, Canadian farm operators will have the opportunity to take part in a national dialogue by completing the Census of Agriculture questionnaire. The Census of Agriculture is a source of community-level data on agriculture. By drawing on these data, decision makers will act in the interest of farm operators, farm communities and agricultural sectors across Canada.

Administration Resources

Jeff Fleischer, Agricultural and Environmental Services



Farm organizations are heavy users of census data and draw on this information to formulate policy recommendations, produce communications and outreach activities, and conduct market research. Canadian farm operators will receive a letter in May 2021 with instructions on how to complete the census questionnaire online quickly and easily. The online questionnaire will be efficient for farm operators in a number of ways. It will automatically add totals and will only ask the questions that apply specifically to the operator's farm. This will reduce Statistics Canada's need to call farm operators to clarify their answers. Lastly, high-quality alternative sources of data will be used wherever possible to reduce response burden.

6. At the October 22, 2020 ASB meeting, there were some questions regarding the County's snow fence placement and removal program. Agricultural and Environmental Services has contacted Transportation Services and they will provide the ASB with an overview of the program.

BUDGET IMPLICATIONS:

No budget implications.

OPTIONS:

- | | |
|-----------|---|
| Option #1 | THAT the Agricultural Fieldman Report be received as information. |
| Option #2 | THAT alternative direction be provided. |

Respectfully submitted,

Concurrence,

"Jeff Fleischer"

"Byron Riemann"

Manager, Agricultural and Environmental Services

Executive Director, Operations

Attachment 'A' – RVC Crop Insect Survey 2020

INSECT SURVEY RESULTS – 2020 – ROCKY VIEW

2020 Summary

Cabbage seedpod weevil were present in Rocky View in the survey we conducted during early flower. The population throughout Alberta was lower than normal but it is normal for some early flowering fields to accumulated higher populations. None of the Rocky View fields surveyed in 2020 were close to the threshold for cabbage seedpod weevil.

There were 3 bertha armyworm sites in Rocky View County this year. All locations were very low and nowhere near the first warning level of 300 moths. Trapping will continue to be very important to watch for any possible outbreaks in the future.

Wheat midge was found in a couple of the fields surveyed, but not at very high levels. Producers and agronomists should monitor fields in 2021 as the wheat heads out because there may be individual fields that have higher numbers.

Pea leaf weevil damage was low in the survey we conducted in late May – early June. The use of insecticide seed treatment will depend on the individual producer and their approach to risk management. Generally, I would not recommend the use of insecticide seed treatment in your area until the population rebounds.

Very low levels of wheat stem sawfly were found in three of the 4 fields surveyed. Not a huge concern just something to watch, especially if the dry summers persist.

BERTHA ARMYWORM (BAW)

Thank you Laura for all your help with this survey.

Bertha armyworm is very cyclical. In order to catch outbreaks and help producers minimize losses it is necessary to maintain a good monitoring system using pheromone traps. The number of moths caught in the traps informs us of the risk of damaging populations with a 3 to 5 week lead time. These numbers are generated from paired pheromone traps in individual fields, except in the Peace River region where only 1 trap is used to reduce impact on native pollinators.

Bertha armyworm populations are normally kept in check by such factors as weather and natural enemies. Potential damage may be more or less severe than suggested by the moth count data depending on weather and crop conditions and localized population dynamics. Research has clearly shown that very few fields are ever affected in an area with moth catches less than 300. Even at higher moth counts field scouting is critical for pest management decisions because experience has shown that field to field and even within field variations can be very large.

LLD	TRAP AVERAGE
SE-1-29-29-W4	46.5
SE-31-22-27-W4	107.5

Shaded cells were managed by County

LLD	TRAP AVERAGE
NW-1-29-2-W5	67

CABBAGE SEEDPOD WEEVIL (CSPW)

In southern Alberta, including all counties south of and touching Highway 1, the earliest flowering canola crops will be at the highest risk from cabbage seedpod weevil and should be monitored very closely.

Cabbage seedpod weevil overwinters as an adult so the risk of infestation is further indicated by the adult population of the preceding fall. Winter condition also appear to have an impact on populations with mild winter favoring build-up of populations and expansion of their range.

We track the population of other insects in these sweeps as well. These go into long term data sets that will help us research their population trends over time from individual fields.

LEGAL LAND DESCRIPTION					CSPW IN 25 SWEEPS	LYGUS NYMPH	LYGUS ADULT	LEAFHOPPER	FLEA BEETLE	RED TURNIP BEETLE	DBM LARVA	DBM ADULT	WASP <5 MM	WASP >5MM	HONEY BEE	BEE BUT NOT HONEY	CATERPILLAR
ne	2	29	3	5	0	0	0	0	0	0	7	0	0	0	0	0	4
sw	23	29	1	5	0	0	1	0	0	0	0	0	0	0	0	0	0
sw	25	28	28	4	0	0	2	1	0	0	1	0	0	0	0	0	0
se	16	26	27	4	1	0	0	0	0	0	7	0	1	0	0	0	1
ne	33	22	27	4	2	0	10	0	10	0	7	0	0	0	0	0	0

Samples done with standard sweep net. (15" diameter & 3 foot handle). 25-180 degree sweeps.

Sampling done by Alberta Agriculture and Forestry, Plant and Bee Health Surveillance Section staff.

PEA LEAF WEEVIL (PLW)

Experience has shown us that high numbers of pea leaf weevil adults in fall will likely mean significant infestation levels in the following spring. The timing and intensity of spring damage is strongly related to the onset of warm conditions (>20°C) for more than a few days in April or May. The earlier the weevils arrive in fields the higher yield loss potential. Extended cool weather delays weevil movement into the field. Yield impact is lower if the crop advances past the 6 node stage before the weevils arrive. The numbers represented here are generated from assessing feeding damage on 10 plants in 5 locations in a field.

LEGAL LAND DESCRIPTION					AVERAGE NODE STAGE	TOTAL NOTCHES	AVERAGE NOTCHES/PLANT
Se	10	25	27	4	5.3	0	0
nw	27	22	27	4	7.02	3	0.06

Sampling done by Alberta Agriculture and Forestry, Alberta Insect Pest Monitoring Network staff

WHEAT MIDGE (SOIL) (WM)

Wheat midge is an insect that increases in numbers in wet years. Numbers can vary drastically from field to field and we try to sample wheat adjacent to the previous years' wheat in order to pick up populations if they are present. There is no definitive way to know exactly the risk in any given field so field scouting when the wheat comes into head is critical. The numbers shown here give a general trend of midge populations. Individual fields will have a different risk.

These numbers are generated by taking soil samples from wheat fields after harvest using a standardized soil probe.

The risk level as shown on our maps is as follows:

- 0 midge will be displayed as light grey (No infestation)
- 2 or less midge will be shown as dark grey (<600/m²)
- 3 to 5 will be shown as yellow (600 to 1200/ m²)
- 6 to 8 will be shown as orange (1200 to 1800/ m²)
- 9 or more will be shown as red. (>1800/ m²)

LEGAL LAND DESCRIPTION					TOTAL MIDGE	VIABLE	NOT VIABLE	PARASITOID
sw	5	28	25	4	0	0	0	0
sw	30	22	27	4	0	0	0	0
nw	31	27	25	4	1	1	0	0
ne	12	22	24	4	1	1	0	0
nw	11	26	27	4	1	1	0	0
se	35	28	2	5	0	0	0	0
nw	9	28	28	4	0	0	0	0

Sampling done by Alberta Agriculture and Forestry, Alberta Insect Pest Monitoring Network staff.

WHEAT STEM SAWFLY (WSS)

The percent of stems cut by sawfly gives an indication of the number of reproductive adult sawflies that will emerge in late June through early July. Winter conditions have very little impact on sawfly populations and a high proportion of wheat stems cut in the fall will produce adults. It is possible that population hot spots still exist in areas of lower risk, individual producers need to be aware of the potential risks in their own fields.

LEGAL LAND DESCRIPTION					PERCENTAGE CUT	LEGAL LAND DESCRIPTION					PERCENTAGE CUT
ne	12	22	28	4	0.6	sw	5	28	25	4	0.0
nw	11	26	27	4	0.5	nw	9	28	28	4	0.5

Sampling done by Alberta Agriculture and Forestry, Alberta Insect Pest Monitoring Network staff

WHEN DOING FIELD VISITS WE:

- never drive into the field
- sanitize our equipment between fields with bleach solution
- sanitize our footwear between fields with bleach solution or wear boot covers