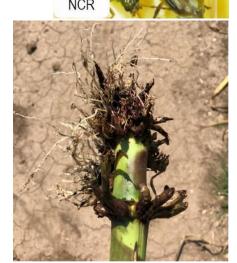
"Kicking the Dirt" 2019 Southwest Wisconsin Agronomy Update By: William Wynn, CCA Pioneer Field Agronomist 1/21/2019

It's hard to imagine on this cold January day that we will be planting in a little over 90 days from now! After talking with one of my colleagues from Southern Texas, I can say I have the spring itch, as they have operations that plan on starting on corn next week! I take this as motivation to make sure my Spring plans are coming together and getting finalized, more specifically around corn rootworm.

Corn Rootworm Risk for 2019

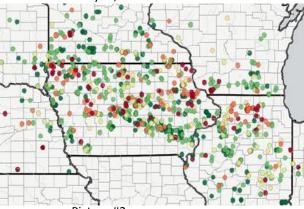
Did you know that corn rootworm is the most expensive damaging pest across the globe? Causing well over a billion dollars worth of damage for corn producers. Corn rootworm damage has certainly been on the rise since 2017, as we observed significant feeding and pruning of roots in isolated areas across Grant, Iowa, Lafayette, and Green counties (see picture #1). We primarily see Western Corn Rootworm (yellow w/black stripes) in our area, but you will see a few Northern CRW (green) from time to time. Another concerning piece of this puzzle, is what I saw from a Bayer/ISU collaboration on CRW beetle monitoring from 2017/2018 and forecasting 2019 populations. In this study, they distributed traps across WI, IL, IA, and MN in fields with corn-corn rotations; and counted beetles to determining the average number of beetles/trap/day. To make it simple, any time you catch 2 or more beetles/trap/day, that number is above the ISU threshold, at this level they recommend crop rotation to break the cycle and limit your risk for further damage. If you plan on planting corn again the following growing season after reaching the 2 beetles/day threshold, we recommend using a pyramided Bt trait with Cry34/35Ab1 or AMXT products (Herculex). Granular insecticides provide good control over CRW and compared to their liquid in furrow counter parts, thus we've seen an increase in use in some of the hot spots across the area.

You may be asking yourself, why should I be concerned going forward? If you are in a predominantly corn-corn rotation, the map on the next page will definitely open your eyes to the forecasted risk of CRW beetles being in the 2-5 range as far as beetles/day/trap are concerned.



WCR

Picture #1
*Wynn, Iowa Co.



Picture #2
*Bayer/ISU CRW Monitoring





PIONEER.

Corn Rootworm Risk 2019 Cont.

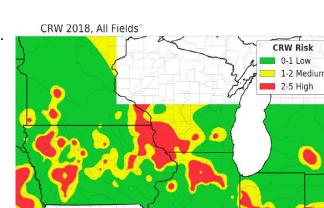
Take a look at the 2019 forecasted CRW risk map to the right (picture #3). It may be a little small, but as you can clearly see, SW WI is in the bullseye for high risk CRW damage in 2019. What gives this map validity in my opinion, is the risk map that they created for the 2018 growing season from 2017 beetle counts (picture #4). The red circle shows the hot spot in NE IA and a little in SW Grant Co. Fast forward to today, and after seeing a significant amount of damage in some hotspots across the area, we must be diligent when planning for the 2019 crop. As I said in my first paragraph, we have a little over 90 days till the first planters hit the field, so take this time now to make sure your game plan for CRW is as solid as Tom Brady, (I had to after they beat my Chiefs last night...).

If your in a corn-corn rotation (3+ years) and you know beetle populations are high in your area look at the following mitigation tactics:

- Consider breaking the cycle with soybeans and/or alfalfa.
- Be sure to be planting pyramided Bt trait w/ Cry34/35Ab1, avoid single below ground traited hybrids.
- Select a hybrid with good root score, more mass is your friend in high pressure situations since rootworms need to feed on roots to ingest Bt proteins to die. Can limit the amount of goose-necking you would see (picture #5).
- Consider use of a granular insecticide (Force3G/6.5G)
- If you observe a large number of beetles in season, especially during
 pollination and silks on plants are being clipped, consider an
 application of insecticide to "thin the herd" and minimize damage and
 scatter grain.
- Monitor w/ sticky traps this season to help make decisions for the future. This is a cheap investment and placing these on a few fields you will have a better understanding of what your pressures currently are and what risk you have for the following year.

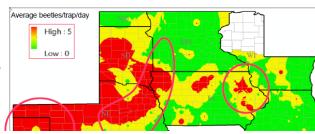
If you have any questions or would like more information, please reach out, we would be glad to help!

Stay warm out there! William Wynn, CCA



Picture #3
*ISU/Bayer CRW Monitoring

2017 beetle counts on corn fields (Based on 1286 fields)



Picture #4
*ISU/Bayer CRW Monitoring



Picture #5
*Pioneer Agronomy Library

