

Potential Corn Rootworm effect on ROI in 2021 and how to limit the damage

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With the corn grain price now over \$5 for new crop corn, and a good chance of a drought being predicted in many areas (drought greatly magnifies yield loss due to root feeding), it appears 2021 could be a very costly year to skimp on rootworm control. Adding to that concern is the fact that the deep and long-lasting snow cover in many areas this past winter, limited frost depth, which usually leads to a great probability of unusually high Corn Root Worm (CRW) larvae survival over winter. These factors may lead to costly rootworm damage in your 2021 corn crop that could adversely affect your 2021 ROI and ease of harvest, unless you control CRW by using hybrids with improved genetic control, using traited CRW corn or insecticide or a combination.

Here are the options to consider controlling CRW: 1) Plant corn hybrids that have been improved genetically for CRW tolerance, 2) Plant corn varieties which have effective CRW traits, 3) Use corn Insecticide or 4) Use a combination from the previous three options to control CRW.

Utilizing improved genetics or CRW traited corn as an insurance policy against this potentially high rootworm damage risk in 2021 could increase your return-on-investment ROI and ease of harvest. Corn insecticide alone could be less effective under drought, but if we have spring rains to activate the insecticide, there would be a large reduction in the number of larvae that reach a stage where they cause significant root feeding damage, therefore making the genetically improved corn or the CRW traited corn more effective if it later turns dry.

If you choose not to use traited CRW corn seed this year, be sure to use insecticide when possible, in areas historically having CRW concerns or in corn-on-corn situations. Another key factor is to choose hybrids with improved corn rootworm tolerance. Miller Hybrids has been doing corn-on-corn plant breeding research for 16 years on at least 1/3 (up to 2/3rds) of our research plots and we have identified some corn varieties with greatly improved natural tolerance to corn rootworm. In several fields with high CRW levels, Miller Hybrids have seen competitive performance to the more costly use of CRW corn.

Whatever method fits your farming operation, remember that late season prior years with late season drought (2005, 2012, 2013, 2020) have been devastating to those who were not using effective CRW control measures where needed. In our opinion, extreme weather events are becoming more frequent, and this will reward farmers with effective CRW control methods that allow their corn to stand through the high winds and yield well despite in the presence of drought and high winds.