

# Kansas Insect Newsletter

For Agribusinesses, Applicators, Consultants and Extension Personnel



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May 8, 2015 No 5

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## Alfalfa

New Handy Bt Trait table available!  
Insect Diagnostic Laboratory Report

## Alfalfa

Wet weather has kept equipment out of the fields and has allowed the insects to flourish. Fortunately, the plants are also doing well and tolerating these healthy populations of pests. When these fields dry out and are able to be swathed, there will probably be relatively significant populations of alfalfa weevil larvae and adults still present. They are accumulated into the windrows at cutting; they will feed on the stems under the windrows until the hay is picked up. This causes the characteristic stripping in the fields where the regrowth under the windrows is chewed off while the areas beside the windrows grow back. Once the hay is removed, the adult weevils will exit the fields and no longer be a problem. Weevil larvae in north central Kansas on 7 May were 93% 3<sup>rd</sup> instar, and 7% 1<sup>st</sup> or 2<sup>nd</sup> instar. There are many pupae and adults also.



There are significant populations of aphids, mainly pea, in these central Kanas alfalfa fields as well. Swathing will remove this problem, but there are many beneficial insects helping to regulate these aphids, and hopefully they will stay around after swathing to help manage any other aphids and/or potato leafhoppers that may show up (no leafhoppers detected yet).

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Pea Aphids



Parasitized Pea Aphid (Mummy)



Lacewing larva (left)  
Lady beetle larva (top)

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Some small grasshoppers were also noted. Usually, grasshoppers do better in drier conditions, but not always. So be aware that grasshoppers are present now and eggs will continue to hatch for the next month.



Jeff Whitworth

Holly Schwarting

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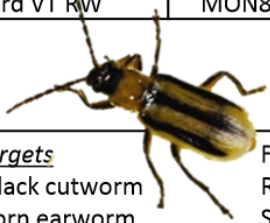
## New Handy Bt Trait table available!

**Want to know which Bt trait is which? What pest they control? Is it herbicide tolerant? What refuge needs to be planted?**

The Handy Bt Trait Table from MSU has all these answers in a handy, easy to use table! This is a great resource for agents, consultants, farmers, seed dealers and anyone else who needs to know more about Bt corn traits.

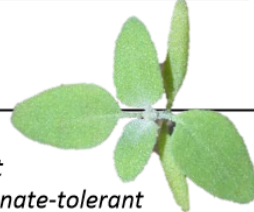
Get your handy copy here: [http://corn.agronomy.wisc.edu/Management/pdfs/Handy\\_Bt\\_Trait\\_Table.pdf](http://corn.agronomy.wisc.edu/Management/pdfs/Handy_Bt_Trait_Table.pdf)

YieldGard VT RW	MON88017	Cry3Bb1+CP4 EPSPS	rootworm + <i>glyphosate tolerance</i>
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**Abbreviations used in Table 2 on page 2**

<u>Insect targets</u>	<u>Herbicide activity</u>
BCW black cutworm	GT <i>glyphosate tolerant</i>
CEW corn earworm	LL Liberty Link, <i>glufosinate-tolerant</i>
ECB European corn borer	RR2 Roundup Ready 2, <i>glyphosate-tolerant</i>
FAW fall armyworm	
RW corn rootworm	
SB stalk borer	
WBC western bean cutworm	



**Table 2. Bt corn trait packages, with spectrum of control and refuge requirements. (Updated April 2015)**

Trait Family Product	Bt protein(s)	Insects <b>controlled</b> or <i>suppressed</i> Above-ground-----In soil	Herbicide tolerant?	Refuge %, placement (for the MIDWEST)
<b>AGRISURE</b>				
Agrisure CB/LL/RW	Cry1Ab mCry3A	<b>ECB CEW FAW SB</b>	<b>RW</b>	LL 20% structured-adjacent
Agrisure 3000GT	Cry1Ab mCry3A	<b>ECB CEW FAW SB</b>	<b>RW</b>	GT LL 20% structured-adjacent
Agrisure Artesian 3011A	Cry1Ab mCry3A	<b>ECB CEW FAW SB</b>	<b>RW</b>	GT LL 20% structured-adjacent
Agrisure Viptera 3110	Cry1Ab Vip3A	<b>BCW CEW ECB FAW SB WBC</b>	---	GT LL 20% structured-½ mile
Agrisure Viptera 3111	Cry1Ab mCry3A Vip3A	<b>BCW CEW ECB FAW SB WBC</b>	<b>RW</b>	GT LL 20% structured-adjacent
Agrisure 3122 E-Z Refuge	Cry1Ab Cry1F mCry3A Cry34/35Ab1	<b>BCW ECB FAW WBC CEW SB</b>	<b>RW</b>	GT 5% in the bag (RIB)
Agrisure Viptera 3220 E-Z Refuge	Cry1Ab Cry1F Vip3A	<b>BCW CEW ECB FAW SB WBC</b>	---	GT 5% in the bag (RIB)
Agrisure Duracade 5122 E-Z Refuge	Cry1Ab Cry1F mCry3A eCry3.1Ab	<b>BCW CEW ECB FAW SB WBC</b>	<b>RW</b>	GT 5% in the bag (RIB)
Agrisure Duracade 5222 E-Z Refuge	Cry1Ab Cry1F Vip3A mCry3A eCry3.1Ab	<b>BCW CEW ECB FAW SB WBC</b>	<b>RW</b>	GT 5% in the bag (RIB)
<b>HERCULEX</b>				
Herculex 1 (HX1)	Cry1F	<b>BCW ECB FAW WBC CEW</b>	---	LL 20% structured-½ mile

Sarah Zukoff

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## Insect Diagnostic Laboratory Report

<http://entomology.k-state.edu/extension/diagnostician/recent-samples.html>

Eva Zurek

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Department of Entomology

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