

**Bt Corn Products for 2015 in the Southeastern U.S. (updated October 13, 2014).** Table courtesy of Kathy Flanders, Auburn University.

Product Trade Name (Abbreviation)	Bt protein(s)	Amount of Insect Control <sup>1</sup>							Herbi- cide Tol- erance <sup>5</sup>	Required refuge in the South <sup>6</sup>	Event(s)
		Corn Ear- worm (ear)	Fall Army- worm (whorl)	Corn Borers <sup>2</sup> (stalk)	Black Cutworm (seed- ling)	LCB <sup>3</sup> (seed- ling)	Corn root- worm <sup>4</sup> (roots)				
		Aboveground			In soil						
Agrisure Products											
Agrisure 3011	Cry1Ab mCry3A	F	F-G	E	P	G	F-G	GT LL	50%	Bt11, MIR604, GA21	
Agrisure Viptera 3110	Vip3Aa20 Cry1Ab	E	E	E	G	G	—	GT LL	20%	MIR162, Bt11, GA21	
Agrisure Viptera 3111	Vip3Aa20 Cry1Ab mCry3A	E	E	E	G	G	F-G	GT LL	20%	MIR162, Bt11, MIR604, GA21	
Agrisure Viptera 3220	Vip3Aa20 Cry1Ab Cry1F	E	E	E	VG	VG	—	GT LL	20%	MIR162, Bt11, TC 1507, GA21	
Herculex and Optimum Products											
Herculex I (HX1or HR)	Cry1F	P	G-VG <sup>7</sup>	E	G	G	—	LL	50%	TC 1507	
Optimum Intrasect (YHR)	Cry1F Cry1Ab	F-G	VG	E	VG	VG	--	LL RR2	20%	TC 1507, MON810	
Optimum Intrasect XTRA (YXR)	Cry1F Cry1Ab Cry34Ab1/Cry35Ab1	F-G	VG	E	VG	VG	E	LL RR2	20%	TC 1507, MON810, DAS-59122-7	
Optimum Leptra (VYHR)	Cry1F Cry1Ab Vip3Aa20	E	E	E	VG	VG	—	LL RR2	20%	TC 1507, MON810, MIR162	
YieldGard Products											
YieldGard Corn Borer (YGCB)	Cry1Ab	F	F-G	E	P	G	—	—	50%	MON810	
YieldGard VT Triple (VT3)	Cry1Ab Cry3Bb1	F	F-G	E	P	G	VG	RR2	50%	MON810, MON88017	
Genuity/SmartStax/POWERCORE Products											
Genuity VT Double PRO (GENVT2P)	Cry1A.105 Cry2Ab2	G-VG	E	E	P	VG	—	RR2	20%	MON89034, NK603	
Genuity VT Triple PRO (GENVT3P)	Cry1A.105 Cry2Ab2 Cry3Bb1	G-VG	E	E	P	VG	VG	RR2	20%	MON89034, MON88017	
POWERCORE	Cry1A.105 Cry2Ab2 Cry1F	VG	E	E	G	VG	—	LL RR2	20%	MON89034, TC 1507, NK603	
SmartStax (SSX, Dow) or Genuity SmartStax (GENSS, Monsanto)	Cry1A.105 Cry2Ab2 Cry1F Cry3Bb1 Cry34Ab1/Cry35Ab1	VG	E	E	G	VG	E	LL RR2	20%	MON89034, TC 1507, MON88017, DAS-59122-7	

<sup>1</sup> E = excellent, VG = very good, G = good, F = fair, P = poor. Excellent usually means better than 95 percent control. Poor means less than about 30% control. <sup>2</sup> Southwestern corn borer, European corn borer, and sugarcane borer, and others. <sup>3</sup> Lepidopteran Bt traits do not specifically list lesser cornstalk borer (LCB) as a target pest. <sup>4</sup> Bt rootworm traits target western corn rootworm larvae (CRW), which occurs in areas such as north Alabama and north Georgia. These traits are not effective against southern corn rootworm. <sup>5</sup> GT = Glyphosate tolerant; LL= Liberty Link (glufosinate tolerant); RR2= Roundup Ready 2 (glyphosate tolerant) <sup>6</sup> See product Insect Resistance Management (IRM) documentation from the seed companies for more details. <sup>7</sup>Resistance to Cry1F has been reported in some areas of the Southeast. Adapted from D. Buntin and K. Flanders, 2014, Bt Corn Products for the Southeastern United States. Based on input from the Southern Corn Insect Working Group and the Southern Row Crop Insects Group. **Highlighted insects are the ones most likely encountered in Virginia.**