Integrated Pest & Crop Management

Watch for burcucumber & toothed spurge in 2015 crops

By Kevin Bradley and Mandy Bish

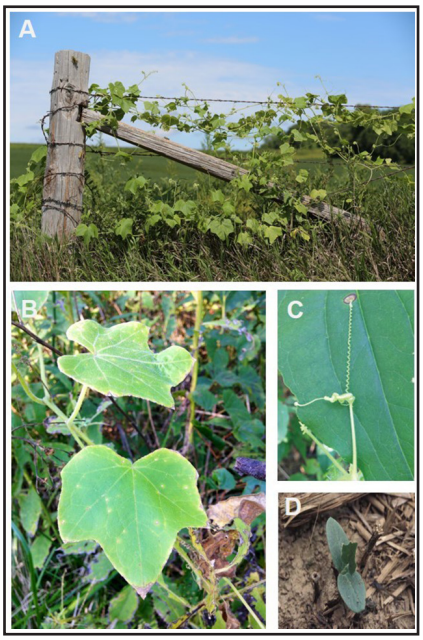

Figure 1: Burcucumber is a vining weed (A), which is becoming more common in Missouri. The leaves are hairy and have 3 to 5 pointed lobes (B). The vine uses tendrils to climb plants and fences for support (C). The cotyledons are thick and oblong (D).

Burcucumber could reduce soybean yield as much as 48 percent, said University of Missouri Extension weed scientist Kevin Bradley at the recent MU Extension Crop Management Conference.

The summer annual weed resembles the cultivated cucumber. It has tendrils for climbing and sticky hairs. The climbing weed is difficult to control in soybean; it can germinate into the later months of the growing season after herbicide applications have been applied. Burcucumber appears most in low-lying areas and near creeks and rivers (Figure 1).

Bradley said its weighty vines also can lodge corn. Pre-emergence applications of atrazine or atrazine-containing pre-mixes will provide early-season control, but a post-emergence herbicide application usually is necessary.

Find a more thorough description of burcucumber and control recommendations at: http://ipm.missouri.edu/ipcm/2014/9/Burcucumber-An-Agronomic-Pest-on-the-Increase/

The toothed spurge (Figure 2), another summer annual, is appearing in northwestern Missouri, Bradley said. It is often incorrectly referred to as a wild poinsettia, and is found in pastures and along roadsides. Recently toothed spurge has become more common in soybean fields.

The plant can grow up to 2 feet tall and has light green to reddish green stems with short hairs. The leaves are elliptical or ovate, have toothed margins, and are usually bunched near the upper portion of the plant. The leaves and stems emit a white milky sap when broken. The sap produces blisters and dermatitis in humans, cattle and horses and causes blindness if it comes in contact with the eye.

Toothed spurge is tolerant to normal use rates of glyphosate, and little information is presently available on the control of toothed spurge in corn and soybean production systems. Pre-emergent application of atrazine and isoxaflutole seem to provide good control in corn and flumioxazin in soybean.

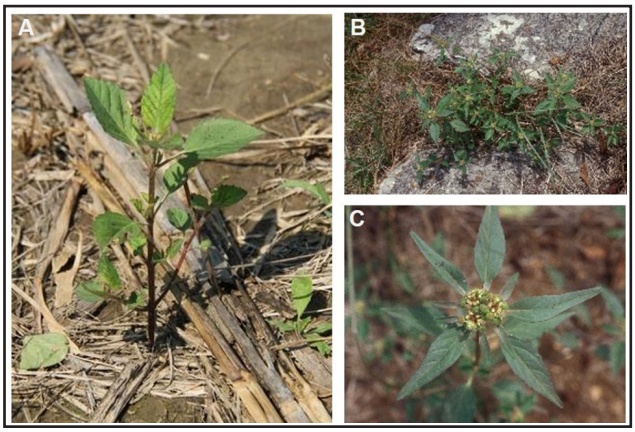

Figure 2: Toothed spurge is becoming more common in Missouri fields. (A) A toothed spurge plant emerges in a field. (B) Toothed spurge can be found in pastures and roadsides as well. (C) The leaves of toothed spurge resemble wild poinsettia.

Find more information on toothed spurge and POST herbicide control options at: http://ipm.missouri.edu/IPCM/2014/7/Weed-of-the-Month-Toothed-Spurge/

The MU Extension's WEED ID guide can be found on the Web site:

http://weedid.missouri.edu/ And is available as a free app, called ID Weeds, for Apple and Android mobile devices.

In This Issue

Crop Insurance Update: Yield Exclusion

By Ray Massey

The 2014 Farm Bill included a provision of yield exclusion in the calculation of Actual Production History (APH) used in crop insurance decisions. Yield Exclusion (YE) allows producers, at their discretion, to drop certain years' production from the APH calculation.

Counties whose yield for a year was below 50% of the average of the previous 10-year county yields are eligible for YE. Also eligible are counties contiguous to these counties. The maps at right show which years in each county are eligible for the corn and soybean YE provision, as determined by the USDA Risk Management Agency. More maps for other non-irrigated and irrigated crops can be found at http://crops.missouri.edu/insurance/APHexclusion.htm.

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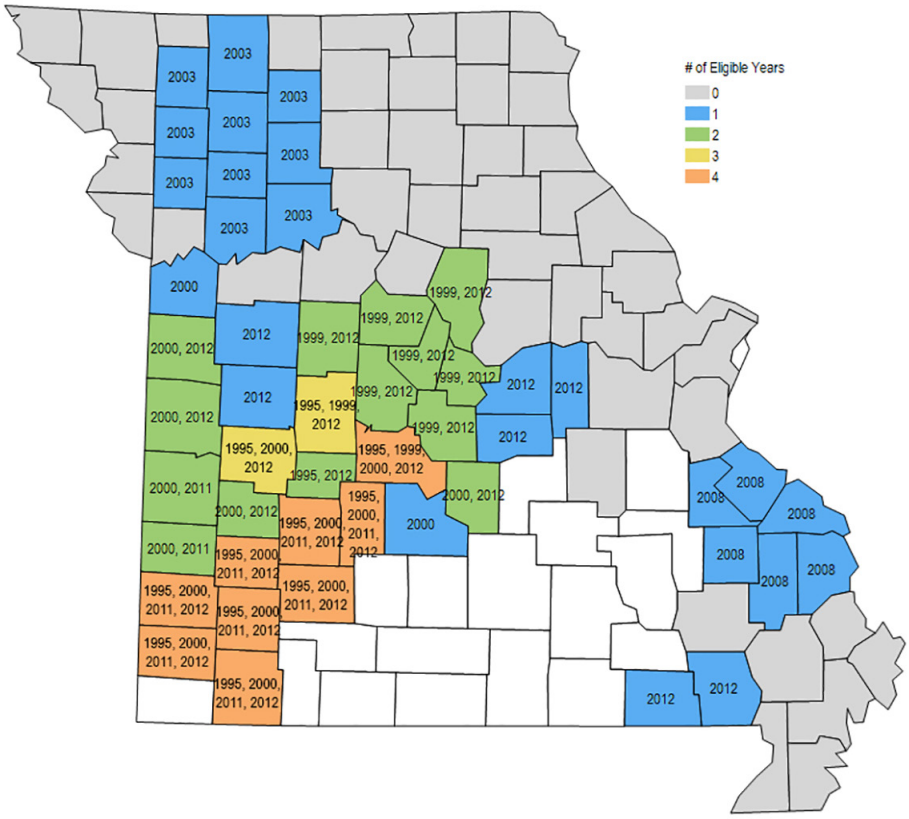
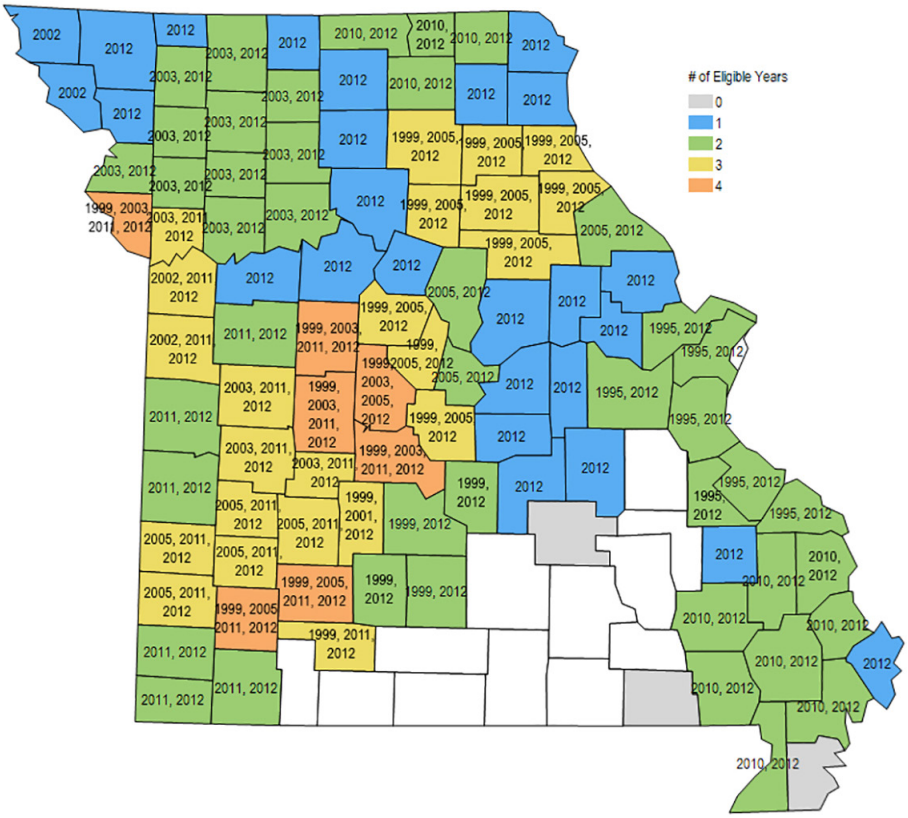
Non-Irrigated Soybean Yield Exclusions



Non-Irrigated Corn Yield Exclusions



Crop Insurance Update: Yield Exclusion

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The table below shows an example of the effect of YE, assuming both actual APH and trend adjusted APH. The example is for Audrain county, Missouri where the RMA has determined that years 2005 and 2012 are eligible for yield exclusion for non-irrigated corn. The normal APH for this farmer would be 115 bushels/acre. If YE is taken, the APH rises to 132.6 bushels/acre. If trend adjusted APH is used, the guarantee goes from 123.3 bushels/acre to 140.6 bushels/acre. Either way, the YE provision allows this farmer to increase APH at least 17 bushels/acre.

Electing YE does not change the total premium for the same dollar or yield guarantee. Using YE could allow a producer to choose a lower coverage level (percent of yield or revenue protected) while maintaining the same dollar or yield guarantee. However, federal subsidies are higher for lower coverage levels, so the premium might decrease for the same dollar or yield guarantee.

This note is primarily to alert you to talk with your insurance agent about the YE options available to you as you consider 2015 crop insurance decisions. New options exist. Discuss them with your agent.

	Actual Yield		Trend Adjusted-APH Yield	
	without YE	with YE	without YE	with YE
Year	**bu/ac**	**bu/ac**	**bu/ac**	
2005	56		71.1	
2006	134	134	147.6	147.6
2007	123	123	135.1	135.1
2008	144	144	154.6	154.6
2009	145	145	154.1	154.1
2010	122	122	129.6	129.6
2011	105	105	111.0	111.0
2012	33		37.5	
2013	124	124	127.0	127.0
2014	164	164	165.5	165.5
APH Yield	115	132.6		
Trend Adjusted APH			123.3	140.6

Weather Data for the Week Ending January 29, 2015

Station	County	Weekly Temperature (ºF)						Monthly Precipitation (in.)		Growing Degree Days‡	
		Avg. Max.	Avg. Min.	Extreme High	Extreme Low	Mean	Departure from long term avg.	January 1-29	Departure from long term avg.	Accumulated Since Apr 1	Departure from long term avg.
Corning	Atchison	56	26	72	19	41	+15	0.03	-0.70	*	*
St. Joseph	Buchanan	54	29	72	23	41	+14	0.07	-0.58	*	*
Brunswick	Carroll	52	28	66	22	39	+11	0.42	-0.60	*	*
Albany	Gentry	*	*	*	*	*	*	*	*	*	*
Auxvasse	Audrain	50	27	58	19	38	+10	0.71	-0.94	*	*
Vandalia	Audrain	48	27	53	23	37	+9	0.75	-0.98	*	*
Columbia-Bradford Research and Extension Center	Boone	51	28	59	20	38	+8	0.61	-1.04	*	*
Columbia-Capen Park	Boone	54	26	63	16	38	+7	0.58	-1.09	*	*
Columbia-Jefferson Farm and Gardens	Boone	53	28	60	19	39	+9	0.58	-1.07	*	*
Columbia-Sanborn Field	Boone	53	29	62	20	40	+9	0.55	-1.14	*	*
Columbia-South Farms	Boone	52	28	60	19	39	+9	0.59	-1.06	*	*
Williamsburg	Callaway	51	27	57	20	38	+9	0.71	-1.15	*	*
Novelty	Knox	48	25	52	20	36	+9	0.61	-0.48	*	*
Linneus	Linn	51	27	60	22	38	+11	0.24	-0.53	*	*
Monroe City	Monroe	48	26	53	23	36	+9	0.71	-0.72	*	*
Versailles	Morgan	55	30	65	18	41	+9	0.55	-0.98	*	*
Green Ridge	Pettis	54	28	67	17	40	+11	0.44	-0.92	*	*
Lamar	Barton	57	30	73	23	43	+9	0.40	-1.28	*	*
Cook Station	Crawford	52	27	57	20	39	+5	1.43	-0.71	*	*
Round Spring	Shannon	52	27	58	17	38	+5	1.66	-0.54	*	*
Mountain Grove	Wright	52	29	59	22	40	+8	1.32	-0.91	*	*
Delta	Cape Girardeau	46	29	52	24	37	+3	4.32	+1.58	*	*
Cardwell	Dunklin	52	31	59	26	42	+5	1.45	-1.64	*	*
Clarkton	Dunklin	50	31	56	26	40	+3	2.25	-0.66	*	*
Glennonville	Dunklin	49	31	55	26	40	+3	2.96	+0.13	*	*
Charleston	Mississippi	47	30	55	26	39	+4	2.52	-0.38	*	*
Portageville-Delta Center	Pemiscot	49	32	57	26	40	+3	1.91	-1.29	*	*
Portageville-Lee Farm	Pemiscot	49	32	57	28	41	+4	1.58	-1.48	*	*
Steele	Pemiscot	51	30	59	24	40	+3	1.45	-1.73	*	*

‡Growing degree days are calculated by subtracting a 50 degree (Fahrenheit) base temperature from the average daily temperature. Thus, if the average temperature for the day is 75 degrees, then 25 growing degree days will have been accumulated.

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