Wisconsin Crop Manager

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Soil Quality Field Day

Karen Talarczyk, Nutrient and Pest Management Program

Rock County UW-Extension and the UW Nutrient and Pest Management Program will be holding a soil quality field day Wednesday September 16 in Janesville.

The morning session will include presentations on soil organic matter, effect of tillage on soil quality including nutrient stratification in no-till systems, nitrogen availability from cover crops, manures, and composts and cover crops for soil quality. The afternoon field session will include a demonstration of soil quality characteristics using soil pits to compare no-till with conventional tillage. Other demonstrations will include cover crops after wheat including red clover and "tillage" radish.

The field day will be held from 10:00 a.m. to 3:00 p.m. at the Rock County Farm, Hwy 14 (a quarter mile East of Hwy 51). The cost of the program is $10.00 which includes lunch and materials. Four hours of CEUs have been requested. Preregistration is requested to aid meal planning. For more information and to register, please contact the Rock County UW-Extension Office, (608) 757-5696.

Invasive rule NR40 now official in Wisconsin

Mark Renz, Extension Weed Scientist, University of Wisconsin-Madison

The Wisconsin Department of Natural Resources Invasive species law (NR40) is now official as of September 1st. This rule established a classification and regulatory system for invasive species restricting actions such as sales, transportation, planting, or releasing listed species to the wild without a permit. The rule classified species as prohibited or restricted species, they are defined below.

Prohibited species are not yet in the state or only exist as small populations, but have the potential to cause significant damage if they are allowed to spread and become established. It is illegal for people to transport, import, possess, transfer, sell and introduce these species without a permit. Landowners will be expected to control prohibited species found on their property.

Restricted species are invasive species that are already too widespread to expect statewide eradicated. For this classification it is illegal for people to transport, import, transfer, sell and introduce these species, but people may possess plants.

DNR has pledged to work cooperatively with local units of government, businesses, and landowners to educate people on how to identify these species (specifically weeds), develop practices to prevent spread, and assist in finding funding to control prohibited populations. This rule does give DNR staff the right to inspect property for prohibited species and control these species (with landowner permission or a judicial inspection warrant). If the prohibited species is not controlled upon order, DNR or its designee may control it and recover expenses it incurs. After several conversations with DNR staff I am convinced that their intent is to use this rule as an educational tool and not for regulation. Educational materials and resources are currently being made by DNR staff and will be available throughout the winter to educate citizens about the rule.

While none of these plants classified by the rule have any direct agronomic value as a crop, producers will need to ensure that they are not transporting viable propagules (seeds or perennial tissue that can resprout) of Uprohibited and restricted speciesU as this is illegal (unless a permit is obtained). While the rule exempts people who incidentally or unknowingly transport, possess, transfer or introduce a listed invasive species, knowledgeable producers must demonstrate that they took reasonable precautions to prevent movement of listed species. An example of this situation would be haying a field filled with listed plants like spotted knapweed or Canada thistle and transporting the bales to another location off farm. Producers can transport plant tissue of these species, but they must be incapable of reproducing/propagating. So harvesting these fields before any viable seeds are produced would be considered an adequate practice to prevent spread by DNR as the producer

took steps to prevent movement of propagules of known listed plants. More guidance and information on how to interpret this rule will be extended this fall and winter as interpretations of the rule occur.

To see additional information about NR40, go to Uhttp://dnr.wi.gov/invasives/classification/U

Tables below list prohibited (27), restricted (34), and prohibited/restricted (12) plant species listed in NR40.

Restricted plant species (34)

Common name	Scientific name
Autumn olive	Elaeagnus umbellata
Bells honeysuckle	Lonicera x bella
Canada thistle	Cirsium arvense
Cattail hybrid	Typha x glauca
Common buckthorn	Rhamnus cathartica
Common teasel	Dipsacus fullonum subsp. sylvestris
Creeping bellflower	Campanula rapunculoides
Curly-leaf pondweed	Potamogeton crispus
Cut-leaved teasel	Dipsacus laciniatus
Cypress spurge	Euphorbia cyparissias
Dame's rocket	Hesperis matronalis
Eurasian water milfoil	Myriophyllum spicatum
Flowering rush	Butomus umbellatus
Garlic mustard	Alliaria petiolata
Glossy buckthorn (CV)	Frangula alnus
Helleborine orchid	Epipactis helleborine
Hemp nettle, brittlestem hemp nettle	Galeopsis tetrahit
Hound's tongue	Cynoglossum officinal
Japanese knotweed	Polygonum cuspidatum
Leafy spurge	Euphorbia esula
Morrow's honeysuckle	Lonicera morrowii
Multiflora rose	Rosa multiflora
Musk thistle	Carduus nutans
Narrow-leaf cattail	Typha angustifolia
Oriental bittersweet	Celastrus orbiculatus
Phragmites, Common reed	Phragmites australis
Plumeless thistle	Carduus acanthoides
Purple loosestrife	Lythrum salicaria
Russian olive	Elaeagnus angustifolia
Spotted knapweed	Centurea biebersteinii, c. stoebe
Tansy (CV)	Tanacetum vulgare
Tartarian honeysuckle	Lonicera tatarica
Tree-of-heaven	Ailanthus altissima
Wild parnsip	Pastinaca sativa

Prohibited plant species (27):

Common name	Scientific name
Australian swamp crop	Crassula helmsii
Brazilian waterweed	Egeria densa
Brittle waternymph	Najas minor
Chinese yam	Dioscorea oppositifolia
European frog-bit	Hydrocharis morsus-ranae
Fanwort, Carolina Fanwort	Cabomba caroliniana
Giant hogweed	Heracleum mantegazzianum
Giant knotweed	Polygonum sachalinense
Hydrilla	Hydrilla verticillata
Japanese honeysuckle	Lonicera japonica
Japanese stilt grass	Microstegium vimineum
Kudzu	Pueraria lobata
Mile-a-minute vine	Polygonum perfoliatum
Oxygen-weed, African elodea	Lagarosiphon major
Pale swallow-wort	Vincetoxicum rossicum
Parrot feather	Myriophyllum aquaticum
Perennial pepperweed	Lepidium latifolium
Porcelain berry	Ampelopsis brevipedunculata
Princess tree	Paulownia tomentosa
Sawtooth oak	Quercus acutissima
Scotch broom	Cytisus scoparius
Sericea lespedeza	Lespedeza cuneata
Spreading hedge parsley	Torilis arvensis
Water chestnut	Trapa natans
Wineberry	Rubus phoenicolasius
Yellow floating heart	Nymphoides peltata
Yellow star thistle	Centaurea solstitialis

Prohibited/restricted plants (12):

Common name	Scientific name
Amur honeysuckle	Lonicera maackii
Black swallow-wort	Vincetoxicum nigrum
Celandine	Chelidonium majus
European marsh thistle	Cirsium palustre
Hairy willow herb	Epilobium hirsutum
Hill mustard	Bunias orientalis
Japanese hedge-parsley	Torilis japonica
Japanese hops	Humulus japonicus
Lyme grass or sand ryegrass	Leymus arenarius
Poison hemlock	Conium maculatum
Tall or Reed manna grass	Glyceria maxima
Wild chervil	Anthriscus sylvestris

[1] Prohibited/restricted species are ones that have large populations in a portion of the state, but are uncommon elsewhere. These plants are listed as restricted in the areas where the plant is common, but prohibited elsewhere in the state. The rule provides specific geographic references that define the where the classification changes (e.g county, highway).

Recommendations for Winter Wheat Establishment in 2009

Shawn Conley, State Soybean and Small Grains Specialist, Paul Esker, Extension Field Crops Plant Pathologist, John Gaska, Outreach Specialist

Winter wheat establishment recommendations:

1. Plant new seed (don't plant saved seed).
2. A fungicide seed treatment is recommended for winter wheat.
3. Wheat should be planted 1 inch deep.
4. The targeted fall stand for wheat planted from September 15th to October 1st is between 30 and 35 plants per square foot (1,300,000 and 1,500,000 seeds per acre).
5. The optimal seeding rate for wheat planted after October 1st should be incrementally increased as planting date is delayed to compensate for reduced fall tillering.
6. If saved seed is planted, increase seeding rate to compensate for reduced plant vigor.

Seeding Depth

Wheat should be planted ~1.0 inch deep depending upon soil moisture conditions. Wheat planted less than 0.5 inches deep may result in uneven germination due to seed exposure or dry soil conditions. Shallow planted wheat is also more susceptible to soil heaving. Wheat planted more than 1.5 inches deep may result in death due to pre-mature leaf opening or poor tiller development and winter survival. Uniform seed placement and seeding depth are important in promoting crop health in the fall.

Seeding rate and planting date

The targeted fall stand for wheat planted from September 15th to October 1st is between 30 and 35 plants per square foot. To achieve this goal, the seeding rate for soft red winter wheat is between 1,300,000 and 1,500,000 seeds per acre (Table 1). Depending upon varietal seed size, this equates to a range of between 74 and 119 pounds of seed per acre (Table 2). Given the late maturity of Wisconsin's soybean and corn crop, a significant number of Wisconsin's winter wheat acres will likely be planted late in 2009. The optimal seeding rate for wheat planted after October 1st should be incrementally increased as planting date is delayed to compensate for reduced fall tillering (Table 1). The late planting season will also affect crop insurance coverage. Please contact your crop insurance for specific planting date questions for your county.

Winter wheat and crop insurance (Information courtesy of Michele Austin, Director –Insurance Services; Badgerland Financial)

The Wisconsin winter wheat final planting date varies by county, ranging from September 30th to October 10th. If the wheat is seeded after the county's final plant date (late planting period) the crop insurance guarantee is reduced by 1% per day for the first 10 days. If wheat is seeded after the late planting period, the crop insurance guarantee is reduced to 60% of the original guarantee.

Special notes regarding the 2010 crop

Winter wheat coverage is not available in all Wisconsin counties.

Air seeded (flown on by airplane) wheat is not insurable and no premium is charged.

The final day to turn in a 2009 winter wheat claim is October 31st.

The 2010 wheat *APH* price has been set at $5.20. The 2009 price was $7.35.

The 2010 wheat *CRC* price discoveryon CBOT will be determined as follows:

- The Base price tracks from August 15, 2009 - September 14, 2009
  - The Base Price was $8.58 in 2009.
- The Harvest price tracks from July 15, 2010 – August 14, 2010
  - The Harvest Price was $5.17 for 2009.
- There is a 200% maximum difference between the Base and Harvest Prices with no downside limit.

Tables 1 and 2 are on the following page.

Crop Rotation:

Yield data from our long term rotation experiment located at Arlington, WI indicated that wheat grain yield was greatest when following soybean (Table 3) (Lauer and Gaska, 2003-2006, unpublished). Yield of second year wheat (2003 column) was similar to wheat yields following corn for grain or silage. Third (2004), fourth (2005), and fifth (2006) year continuous wheat yields were dramatically lower than the other rotational systems. Our data suggests that growers should plant wheat after soybean first, then corn, and lastly wheat.

Table 3. Winter wheat grain yield following winter wheat, soybean, corn for grain, and corn silage.

Rotation	2003	2004	2005	2006	Average
	----------Winter wheat grain yield bu a^{-1}----------				
Continuous **Wheat**	56.3[1]	47.0	41.8	45.0	47.5
Corn-Soybean-**Wheat**	66.3	51.0	71.8	74.0	65.8
Soybean-Corn (grain)-**Wheat**	55.7	42.0[2]	51.1	66.0	53.7
Soybean-Corn (silage)-**Wheat**	57.7	51.0	62.0	69.9	60.2

[1]2003 marked the second year of the continuous wheat rotation treatment

[2]Poor stand establishment in the 2004 Soybean-Corn (grain)-Wheat rotation affected wheat yield.

Table 1. Wisconsin seeding rate recommendations based on planting date

Wisconsin Winter Wheat Seeding Rate Recommendations

Seeds/acre Million	Seeds/sq ft	Row Width			
	6	7	7.5		
		Plants per foot row			
0.4	9.2	5	5	6	
0.5	11.5	6	7	7	
0.6	13.8	7	8	9	
0.7	16.1	8	9	10	
0.8	18.4	9	11	11	
0.9	20.7	10	12	13	Seeding Rate for Sept 1 to Sept 15
1.0	23.0	11	13	14	
1.1	25.3	13	15	16	
1.2	27.5	14	16	17	
1.3	29.8	15	17	19	
1.4	32.1	16	19	20	Seeding Rate for Sept 15 to Oct. 1
1.5	34.4	17	20	22	
1.6	36.7	18	21	23	
1.7	39.0	20	23	24	
1.8	41.3	21	24	26	
1.9	43.6	22	25	27	Seeding Rate for Oct. 1 to Oct 10
2.0	45.9	23	27	29	
2.1	48.2	24	28	30	
2.2	50.5	25	29	32	
2.3	52.8	26	31	33	
2.4	55.1	28	32	34	
2.5	57.4	29	33	36	

Table 2. Seed size and seeding rate conversion table.

	Seeds per acre (x 1 million)						
Seeds/lb	1.0	1.2	1.4	1.6	1.8	2.0	2.2
	Pounds of seed/acre						
10000	100	120	140	160	180	200	220
11000	91	109	127	145	164	182	200
12000	83	100	117	133	150	167	183
13000	77	92	108	123	138	154	169
14000	71	86	100	114	129	143	157
15000	67	80	93	107	120	133	147
16000	63	75	88	100	113	125	138
17000	59	71	82	94	106	118	129

If growers choose to plant second year wheat several management factors should be considered to reduce risk. First plant a different wheat variety in that second year that possesses a strong disease package. Under no circumstances should growers consider planting bin-run seed in second year wheat. By planting a different variety with strong disease resistance characteristics you can reduce the likelihood of early disease pressure and significant yield loss. Growers should also consider using a seed treatment in wheat following wheat. Be aware that seed treatments are not a cure all for all common diseases in continuous wheat systems (e.g. take-all). Growers should also consider increasing their seeding rate to 1.8 to 2.0 million seeds per acre in wheat following wheat systems. This will aid in stand establishment and increase the likelihood of a uniform stand going into the winter. Lastly, if using a no-till system, planting into a seedbed that is free of living volunteer wheat is important in reducing the incidence of Barley Yellow Dwarf Virus. Growers should consider a herbicide application to any living volunteer wheat prior to planting to prevent a "green bridge" for the aphids that vector this virus.

Plant New Seed in 2009

- **To maximize wheat yields in 2010, it is imperative that growers plant certified or private (professionally prepared) seed that is true to variety, clean, and has a high germination percentage (>85%).**

The main reason to avoid planting bin-run seed in 2009 is Fusarium Head Blight (FHB), also known as scab. Scab incidence and severity was not as severe in the 08/09 crop as it was in the 07/08 crop, however the presence of scab was noted at all of our variety trial locations in 2009.

Kernels from heads infected with scab may be shriveled or shrunken and lightweight. Some kernels may have a pink to red discoloration (Image 1). Others may be bleached or white in color. Black point or kernel smudge was also noted across the state and may be caused by a number of different fungi including species of Alternaria, Fusarium, and Helminthosporium. Affected kernels appear black-pointed. The embryo end of the seed is discolored with a darkened pericarp and may be shriveled. The fungi that cause black point or scab of wheat seed may survive in or on the seed, thus affecting germination and contributing to seedling blight problems if seed is planted. Fungicide seed treatment and the use of quality seed will help reduce seedling blight due to infected seed but will ***not*** protect against subsequent head blight. Planting good quality, disease-free seed is an effective means of preventing problems from these seedborne pathogens.

Image 1. Scabby and Tombstone Kernels (Photo courtesy of Laura Sweets)

If growers absolutely need to plant saved seed due to availability or other economic considerations, the following steps should be taken to increase the likelihood of establishing a legal and good wheat crop.

The first step is to determine if you can legally plant the wheat seed you saved. Today many private wheat varieties now come with statements, which buyers sign at the time of purchase, stating that they understand they are not authorized to use the harvested grain for seed. Most currently used public winter wheat varieties are Plant Variety Protected (PVP) and though you may replant them on your own land you, do not have the right to trade/sell seed of those varieties to others for planting.

Once you have determined if you can legally plant the seed you saved, the next step is to clean the wheat seed. It is important that wheat seed be cleaned to remove small and damaged seeds and to eliminate weed seeds. Removing small and damaged seeds will not only aid in crop establishment, but will also provide a more uniform wheat seedling stand. Removing small and damaged seeds will also increase the thousand-kernel weight (TKW), which serves as a measure of seed quality. Wheat seed with TKW values greater than 30 grams tend to have increased fall tiller number and seedling vigor.

The next step is to perform a germination test. Germination tests can either be completed at home or by sending a sample to the Wisconsin Improvement Association. A home test can be performed by counting out 4 sets of 100 seeds and placing each of them in a damp paper towel. Place the paper towel into a plastic bag to conserve moisture and store in a warm location out of direct sunlight. After five days count the number of germinated seeds that have both an intact root and shoot. This will give the grower an estimate of % germination. It is important to choose random seeds throughout the entire seed lot and conduct at least 4 - 100 seed counts. If germination is below 85% it is important to increase the seeding rate to compensate; however, I would caution growers from seeding any wheat with a germination test below 80%.

The last step is to assess the need for a fungicide seed treatment. A number of fungicides are labeled for use as seed treatment fungicides on winter wheat and are listed in the *Pest*

Management for Wisconsin Field Crops 2009 (UW-Extension A3646). These seed treatment fungicides protect germinating seed and young seedlings from seedborne and soilborne pathogens. Seed treatment fungicides will not improve germination of seed that has been injured by environmental factors and will not resurrect dead seed. Seed treatment fungicides applied this fall will not protect against FHB infection next summer. If seed with black point or scab must be used for planting, a seed treatment fungicide should be considered.

Hail Damaged Corn – Risk of Molds and Mycotoxins?

Paul Esker, Joe Lauer, and Dan Undersander Extension Plant Pathology, Extension Corn Agronomist, and Extension Forage Agronomist UW-Madison and UW-Extension

In late July, there was a significant hail event in Wisconsin, primarily located in the southwestern portion of the state (Fig. 1). At that time, the corn crop was at approximately the R1 (silking) growth stage, but ranging from pre-VT (pre-tasseling) to R1. The hail event led to extensive bruising on the ear, husks, and stalks, however, the severity of the hail event varied from field to field. While some fields had finished pollinating, with bruising on ears, others had not yet started the pollination process and ears were unaffected.

Since that time we have received numerous questions regarding the risk of mold and/or mycotoxin development in fields damaged by hail. The simplest answer is that we cannot predict that either mold growth or mycotoxin development will occur in these fields since there are numerous factors that must be considered. Also, the occurrence of field molds does not necessarily mean that there will be mycotoxin development. However, monitoring of fields and sampling and testing for specific mycotoxins can improve understanding of the risk of contamination.

Fig. 1. Hail damage that occurred in late July 2009 in research plots at the Lancaster Agricultural Research Station.

Corn for Grain or Silage? Concern for possible mycotoxin development increases the longer corn remains in the field. The highest risk for mycotoxin contamination would be in corn for grain, followed by high moisture corn, and lastly corn for silage. Additionally, increased risk for stalk rots is likely for heavily bruised plants.

What to Look For? Walking hail affected fields at the Lancaster ARS on 31 August, there was some early evidence of ear rots, including Fusarium or Gibberella ear rot. Fusarium ear rot typically begins where kernels have been damaged and will be white to pink or salmon-colored in appearance (Robertson and Munkvold 2009). Gibberella ear rot is different in that it is typically not associated with damaged kernels and will be a pink mold that starts at the tip of an ear. It should be noted that the field where these observations were made has had a history of Gibberella. Aspergillus ear rot is also associated with damaged kernels and will have powdery olive green appearance. As a reminder, evidence of the mold on the ear does not mean that there is mycotoxin present.

Mycotoxins: Currently, there are 400-500 known mycotoxins, which are produced by fungi. Production of mycotoxins can occur in both the field and in storage, although it is thought that most contamination occurs in the field (Payne 1999). When mycotoxin contamination can occur is also dependent on the type of mycotoxin. While most aflatoxin contamination would occur in the field, mycotoxins produced by Penicillium would occur in silage, especially if fermentation is poor.

Mycotoxin development is highly dependent on the environment, factors that may cause wounding on the plant, or can occur when resource demand is high or resources are limiting. Three key environmental components for mycoxtoxin contamination are temperatures above freezing, moisture above 20%, and oxygen are required (Gotlieb 2004). In storage, the risk of mycotoxin contamination can be reduced with proper drying or ensiling conditions, however, there is a risk of contamination occurring at the end of silage use, where the original infection occurred in the field (Richard et al. 2007).

- **Fusarium mycotoxins:** These mycotoxins include deoxynivalenol (DON; produced by several species of *Fusarium*, including *F. graminearum*), zearalenone (*F. graminearum*), and fumonisin B1 and T-2 (multiple species of *Fusarium*). Of these mycotoxins, DON is the most common. In silage, DON does not appear to have a significant effect, however, in grain, production of DON is favored by grain moisture of 21% or more and temperatures from 21-29ºC. It is thought that rumen microorganisms are also able to degrade DON to less toxic form.

- **Aflatoxin:** This toxin is produced by two species, *Aspergillus flavus* and *A. parasiticus*. Aflatoxin is globally very important, since it is listed as a carcinogen for humans. However, development of aflatoxin is typically favored by hot and dry conditions.

- **Penicillium mycotoxins:** In silage, *P.*

roqueforti is a common fungus. This organism is a saprophyte that grows well in low oxygen and acidic environments. There are multiple toxins produced by *P. roqueforti*, including, PR toxin, roquefortin C, patulin, and mycophenolic acid. While the effect of these toxins on dairy cattle is not well known, proper harvest timing and ensiling can reduce the risk of toxin development.

Recommendations: Continue to monitor hail-affected fields closely. Harvesting on the early side of the optimum moisture range may help reduce the risk for mold and/or mycotoxin development. Corn grown for grain would normally be harvested between 25% to 20 % moisture. For corn grown for silage, we recommend using silage drydown days to help estimate harvest timing. The proper harvest moisture for the storage structure varies (i.e. bunker = 70% to 65% while concrete stave = 65% to 60%), but ensiling on the wetter side of these ranges can reduce the risk of mycotoxin development. This is in part because the anaerobic conditions and low pH should arrest development of the fungi that require an aerobic environment.

Sampling for mycotoxins in corn silage should occur just prior to ensiling, while sampling corn for grain can be done prior to harvest by collecting ears at random throughout the field. It is recommended to sample at least 25 ears (Robertson and Munkvold 2009) since that will provide a better estimate of the entire field.

Laboratories that test for mycotoxins are listed in A3646, Pest Management in Wisconsin Field Crops and this is available at: http://learningstore.uwex.edu/Pest-Management-in-Wisconsin-Field-Crops2009-P155C37.aspx

Useful Resources

Gotlieb, A. 2004. Mycotoxins in silage: A silent loss in profits. (http://www.uvm.edu/pss/vtcrops/?Page=articles/Mycotoxins.html, Accessed 1 September 2009).

Kuldau, G. A. Managing mycotoxins in Northeast silages. (http://128.118.11.160/dairynutrition/documents/kuldau.pdf, Accessed 30 August 2009).

Payne, G.A. 1999. Mycotoxins and mycotoxicoses. Pages 47-49 in: D.G. White (Ed.) Compendium of Corn Diseases, Third Edition. APS Press, St. Paul, MN.

Rankin, M., and Grau, C. 2002. Agronomic considerations for molds and mycotoxins in corn silage. Focus on Forage 4(1): 1-4. (http://www.uwex.edu/ces/crops/uwforage/Mycotoxins.htm, Accessed 30 August 2009).

Richard, E., Heutte, N., Sage, L., Pottier, D., Bouchart, V., Lebailly, P., and Garon, D. 2007. Toxigenic fungi and mycotoxins in mature corn silage. Food and Chemical Toxicology 45: 24020-2425.

Robertson, A., and Munkvold, G. 2009. Risk of mycotoxins associated with hail damaged corn. Integrated Crop Management News, Iowa State University – University Extension (http://www.extension.iastate.edu/CropNews/2009/0818robertsonmunkovld.htm, Accessed 30 August 2009).

A Cool Year

Joe Lauer

I don't need to tell you how cool it has been this year. We are all feeling it.

Attached are weather summaries for Arlington and Marshfield. Marshfield is ahead of Arlington for GDU accumulation by 61 GDUs. At Arlington we normally accumulate 2081 GDUs between May 1 and August 31. This year, for the same period, only 1756 GDUs have accumulated.

We still have September to "average" out the year.

To view the weather summaries please visit the article titled "Will Corn Mature in 2009?" on the WCM Downloads Webpage.

Wisconsin Vegetable Crop Update, 2009-11

Vegetable Crop Update newletter issue eleven is out! This marks the eleventh newletter of the 2009 year. Weekly updates should be available as disease, insect, weed, fertilty, and crop progress changes.

The eleventh issue has been posted on the IPCM web site on a new page titled appropriately : The Vegetable Crop Update page. Look for a new menu item under "WCM-News" to find this page, or click here >>> http://ipcm.wisc.edu/WCMNews/VegCropUpdate/tabid/115/Default.aspx