MICHIGAN STATE UNIVERSITY Extension

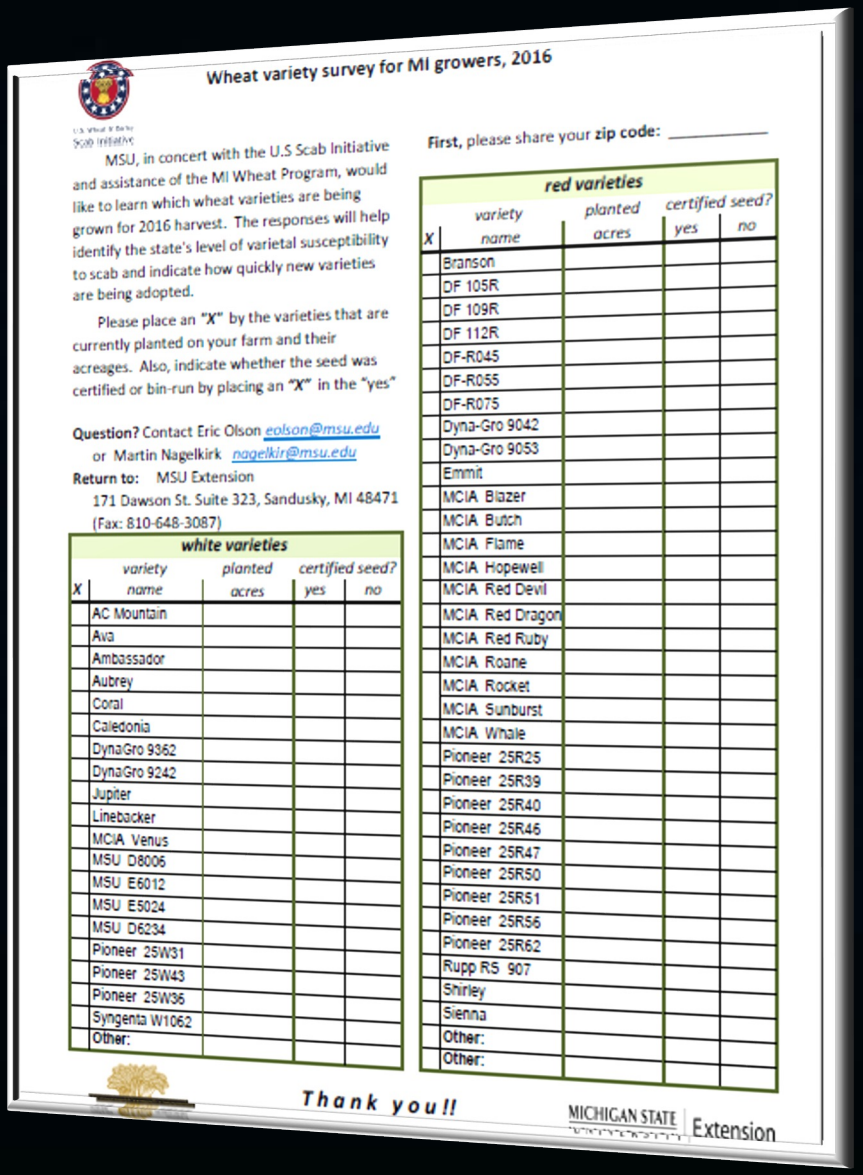
MICHIGAN WHEAT PROGRAM
P.O. Box 25065
Lansing, MI 48909
1-888-WHEAT01 (943-2801)
www.miwheat.org

Informational resources

soft winter wheat in MI
2016

Wheat variety survey

Please take a moment to complete survey



Wheat variety survey for MI growers, 2016

U.S. Wheat & Barley Scab Initiative

MSU, in concert with the U.S Scab Initiative and assistance of the MI Wheat Program, would like to learn which wheat varieties are being grown for 2016 harvest. The responses will help identify the state's level of varietal susceptibility to scab and indicate how quickly new varieties are being adopted.

Please place an "X" by the varieties that are currently planted on your farm and their acreages. Also, indicate whether the seed was certified or bin-run by placing an "X" in the "yes"

Question? Contact Eric Olson eolson@msu.edu
or Martin Nagelkirk nagelkir@msu.edu

Return to: MSU Extension
171 Dawson St. Suite 323, Sandusky, MI 48471
(Fax: 810-648-3087)

First, please share your **zip code:** _____

white varieties

X	variety name	planted acres	certified seed? yes	no
	AC Mountain			
	Awa			
	Ambassador			
	Aubrey			
	Coral			
	Caledonia			
	DynaGro 9362			
	DynaGro 9242			
	Jupiter			
	Linebacker			
	MCIA Venus			
	MSU D8006			
	MSU E6012			
	MSU E5024			
	MSU D6234			
	Pioneer 25W31			
	Pioneer 25W43			
	Pioneer 25W36			
	Syngenta W1062			
	Other:			

red varieties

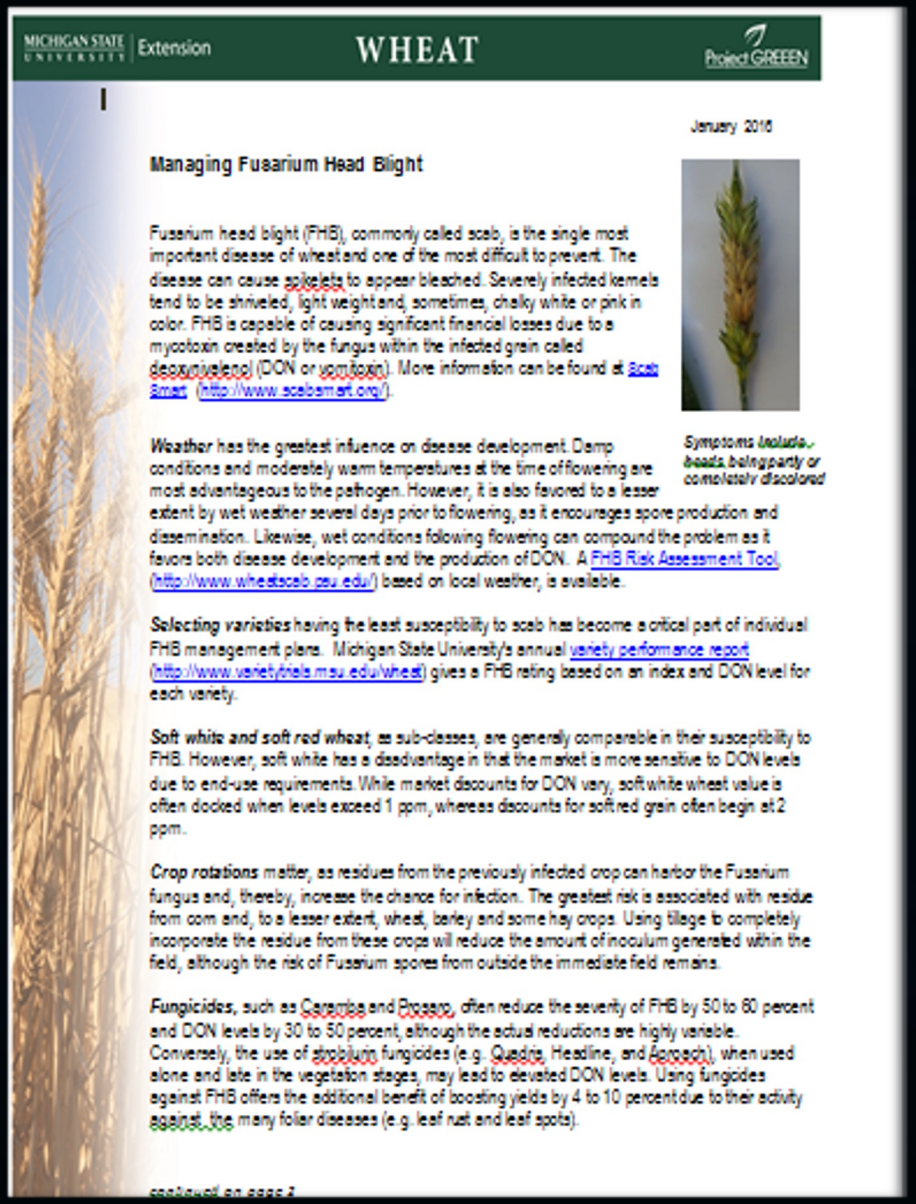
X	variety name	planted acres	certified seed? yes	no
	Branson			
	DF 105R			
	DF 109R			
	DF 112R			
	DF-R045			
	DF-R055			
	DF-R075			
	Dyna-Gro 9042			
	Dyna-Gro 9053			
	Emmit			
	MCIA Blazer			
	MCIA Butch			
	MCIA Flame			
	MCIA Hopewell			
	MCIA Red Devil			
	MCIA Red Dragon			
	MCIA Red Ruby			
	MCIA Roane			
	MCIA Rocket			
	MCIA Sunburst			
	MCIA Whale			
	Pioneer 25R25			
	Pioneer 25R39			
	Pioneer 25R40			
	Pioneer 25R46			
	Pioneer 25R47			
	Pioneer 25R50			
	Pioneer 25R51			
	Pioneer 25R56			
	Pioneer 25R62			
	Rupp R5 907			
	Shirley			
	Sienna			
	Other:			
	Other:			

Thank you!!

MICHIGAN STATE Extension

U.S. Wheat & Barley
Scab Initiative

Managing Fusarium head blight



MICHIGAN STATE UNIVERSITY | Extension

WHEAT

Project GREEEN

January 2016

Managing Fusarium Head Blight

Fusarium head blight (FHB), commonly called scab, is the single most important disease of wheat and one of the most difficult to prevent. The disease can cause spikelets to appear bleached. Severely infected kernels tend to be shriveled, light weight and, sometimes, chalky white or pink in color. FHB is capable of causing significant financial losses due to a mycotoxin created by the fungus within the infected grain called deoxynivalenol (DON or vomitoxin). More information can be found at Scab Smart (http://www.scabsmart.org/).

Symptoms include heads being partly or completely discolored

Weather has the greatest influence on disease development. Damp conditions and moderately warm temperatures at the time of flowering are most advantageous to the pathogen. However, it is also favored to a lesser extent by wet weather several days prior to flowering, as it encourages spore production and dissemination. Likewise, wet conditions following flowering can compound the problem as it favors both disease development and the production of DON. A FHB Risk Assessment Tool (http://www.wheatscab.psu.edu/) based on local weather, is available.

Selecting varieties having the least susceptibility to scab has become a critical part of individual FHB management plans. Michigan State University's annual variety performance report (http://www.varietytrials.msu.edu/wheat) gives a FHB rating based on an index and DON level for each variety.

Soft white and soft red wheat, as sub-classes, are generally comparable in their susceptibility to FHB. However, soft white has a disadvantage in that the market is more sensitive to DON levels due to end-use requirements. While market discounts for DON vary, soft white wheat value is often docked when levels exceed 1 ppm, whereas discounts for soft red grain often begin at 2 ppm.

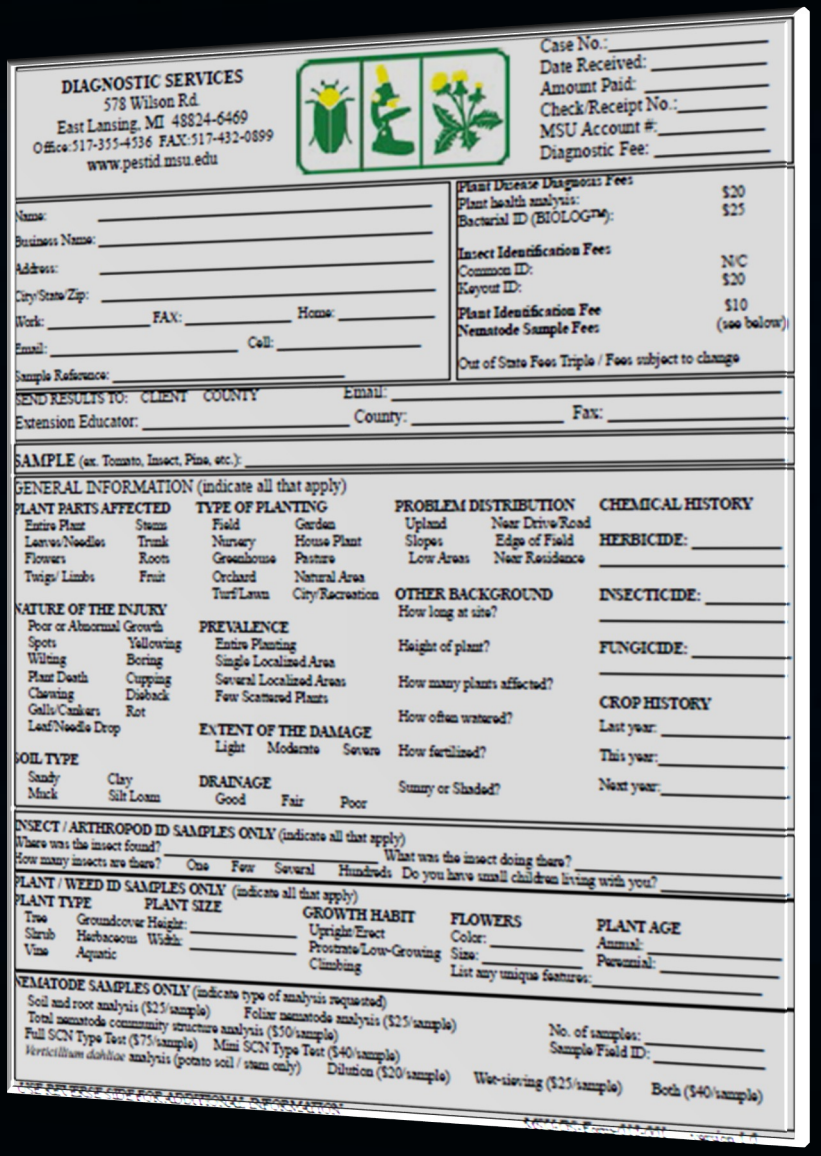
Crop rotations matter, as residues from the previously infected crop can harbor the Fusarium fungus and, thereby, increase the chance for infection. The greatest risk is associated with residue from corn and, to a lesser extent, wheat, barley and some hay crops. Using tillage to completely incorporate the residue from these crops will reduce the amount of inoculum generated within the field, although the risk of Fusarium spores from outside the immediate field remains.

Fungicides, such as Caramba and Prosaro, often reduce the severity of FHB by 50 to 60 percent and DON levels by 30 to 50 percent, although the actual reductions are highly variable. Conversely, the use of strobilurin fungicides (e.g. Quadris, Headline, and Aproach), when used alone and late in the vegetation stages, may lead to elevated DON levels. Using fungicides against FHB offers the additional benefit of boosting yields by 4 to 10 percent due to their activity against the many foliar diseases (e.g. leaf rust and leaf spots).

continued on page 2

Wheat diagnostics

Instructions on reverse side



DIAGNOSTIC SERVICES
578 Wilson Rd.
East Lansing, MI 48824-6469
Office:517-355-4536 FAX:517-432-0899
www.pestid.msu.edu

Case No.:
Date Received:
Amount Paid:
Check/Receipt No.:
MSU Account #:
Diagnostic Fee:

Name:
Business Name:
Address:
City/State/Zip:
Work: FAX: Home:
Email: Cell:
Sample Reference:

Plant Disease Diagnosis Fees
Plant health analysis: $20
Bacterial ID (BIOLOG™): $25

Insect Identification Fees
Common ID: N/C
Keyout ID: $20

Plant Identification Fee $10
Nematode Sample Fees (see below)

Out of State Fees Triple / Fees subject to change

SEND RESULTS TO: CLIENT COUNTY Email:
Extension Educator: County: Fax:

SAMPLE (ex. Tomato, Insect, Pine, etc.):

GENERAL INFORMATION (indicate all that apply)

PLANT PARTS AFFECTED
Entire Plant, Stems, Leaves/Needles, Trunk, Flowers, Roots, Twigs/ Limbs, Fruit

NATURE OF THE INJURY
Poor or Abnormal Growth, Spots, Yellowing, Wilting, Boring, Plant Death, Cupping, Chewing, Dieback, Galls/Cankers, Rot, Leaf/Needle Drop

SOIL TYPE
Sandy, Clay, Muck, Silt Loam

TYPE OF PLANTING
Field, Garden, Nursery, House Plant, Greenhouse, Pasture, Orchard, Natural Area, Turf/Lawn, City/Recreation

PREVALENCE
Entire Planting, Single Localized Area, Several Localized Areas, Few Scattered Plants

EXTENT OF THE DAMAGE
Light, Moderate, Severe

DRAINAGE
Good, Fair, Poor

PROBLEM DISTRIBUTION
Upland, Near Drive/Road, Slopes, Edge of Field, Low Areas, Near Residence

OTHER BACKGROUND
How long at site?
Height of plant?
How many plants affected?
How often watered?
How fertilized?
Sunny or Shaded?

CHEMICAL HISTORY
HERBICIDE:
INSECTICIDE:
FUNGICIDE:

CROP HISTORY
Last year:
This year:
Next year:

INSECT / ARTHROPOD ID SAMPLES ONLY (indicate all that apply)
Where was the insect found? What was the insect doing there?
How many insects are there? One, Few, Several, Hundreds Do you have small children living with you?

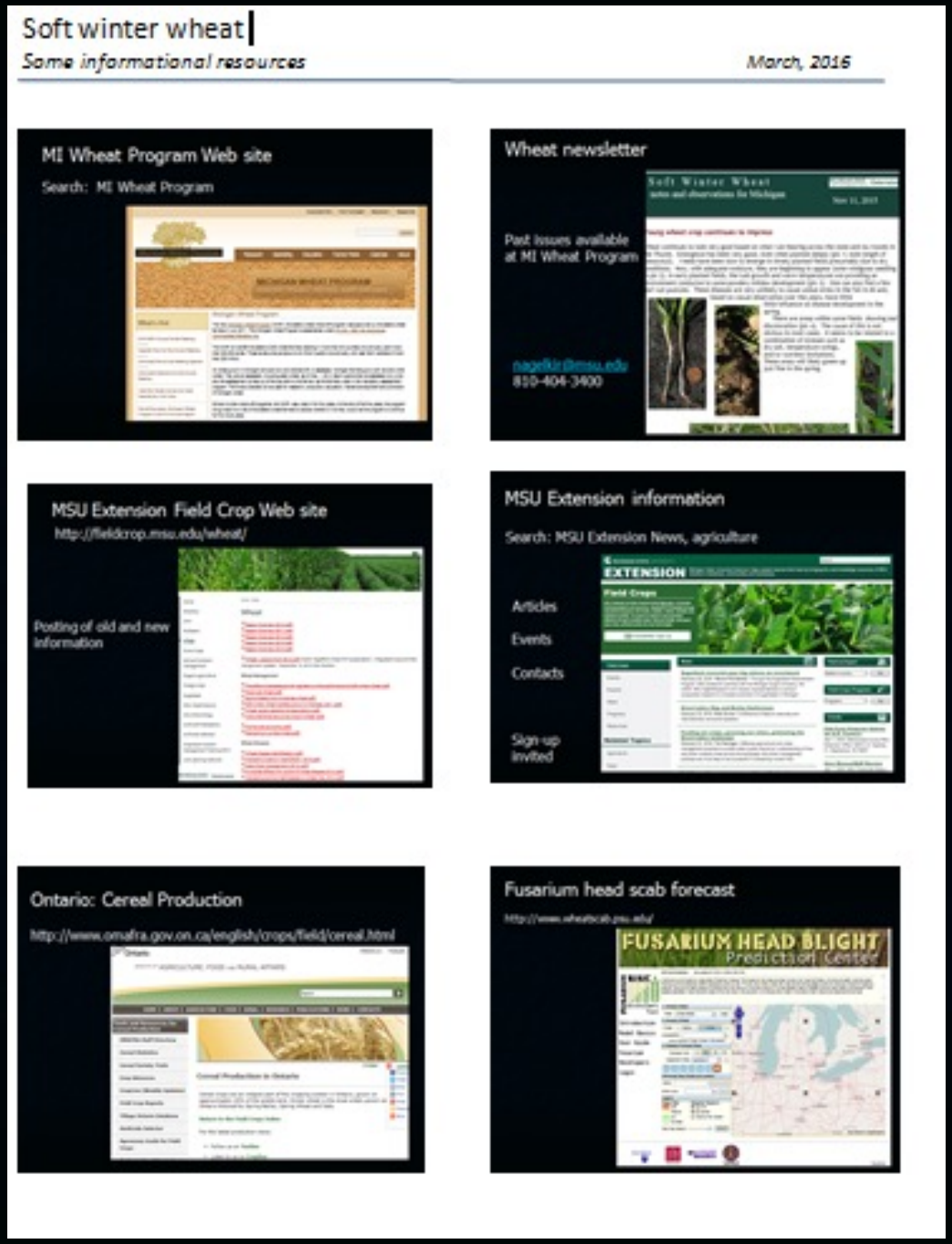
PLANT / WEED ID SAMPLES ONLY (indicate all that apply)
PLANT TYPE: Tree, Shrub, Vine, Groundcover, Herbaceous, Aquatic
PLANT SIZE: Height: Width:
GROWTH HABIT: Upright/Erect, Prostrate/Low-Growing, Climbing
FLOWERS: Color: Size: List any unique features:
PLANT AGE: Annual: Perennial:

NEMATODE SAMPLES ONLY (indicate type of analysis requested)
Soil and root analysis ($25/sample) Foliar nematode analysis ($25/sample)
Total nematode community structure analysis ($50/sample)
Full SCN Type Test ($75/sample) Mini SCN Type Test ($40/sample)
Verticillium dahliae analysis (potato soil / stem only) Dilution ($20/sample) Wet-sieving ($25/sample) Both ($40/sample)
No. of samples:
Sample Field ID:

A few web sites

of interest

(see packet)



MI Wheat Program Web site

http://www.miwheat.org/

Wheat newsletter

Past issues available
at MI Wheat Program

nagelkir@msu.edu
810-404-3400

Soft Winter Wheat
notes and observations for Michigan

MICHIGAN STATE UNIVERSITY Extension

Nov 11, 2015

Young wheat crop continues to impress

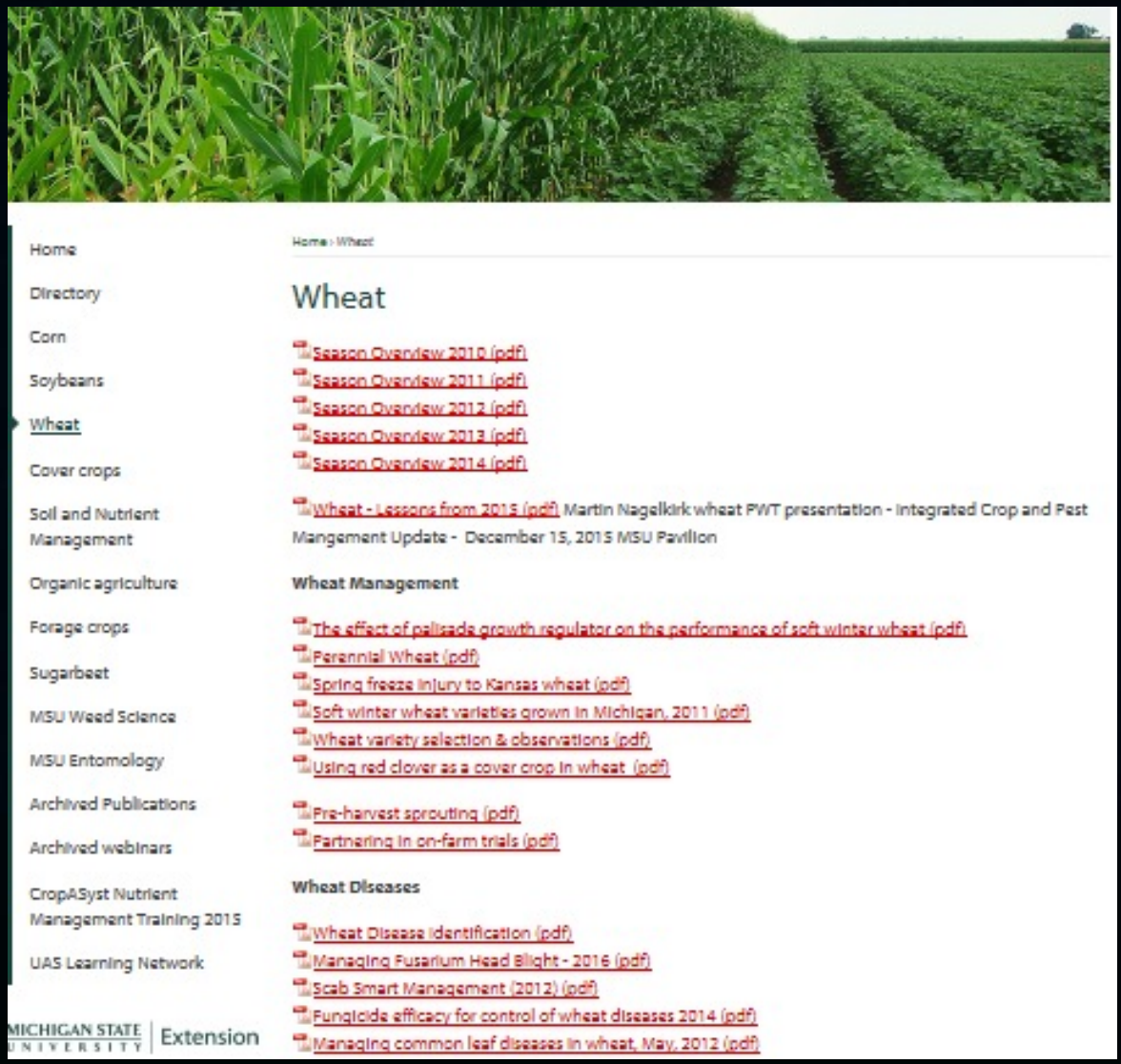
Wheat continues to look very good based on what I am hearing across the state and my travels in the Thumb. Emergence has been very good, even when planted deeply (pic 1; note length of mesocotyl). Weeds have been slow to emerge in timely planted fields presumably due to dry conditions. Now, with adequate moisture, they are beginning to appear (note windgrass seedling in pic 2). In early planted fields, the lush growth and warm temperatures are providing an environment conducive to some powdery mildew development (pic 3). One can also find a few leaf rust pustules. These diseases are very unlikely to cause undue stress in the fall in MI and, based on casual observation over the years, have little little influence on disease development in the spring.

There are areas within some fields showing leaf discoloration (pic 4). The cause of this is not obvious in most cases. It seems to be related to a combination of stresses such as dry soil, temperature swings, and/or nutrient limitations. These areas will likely green-up just fine in the spring.

MSU Extension Field Crop Web site

http://fieldcrop.msu.edu/wheat/

Posting of old and new information



MSU Extension information

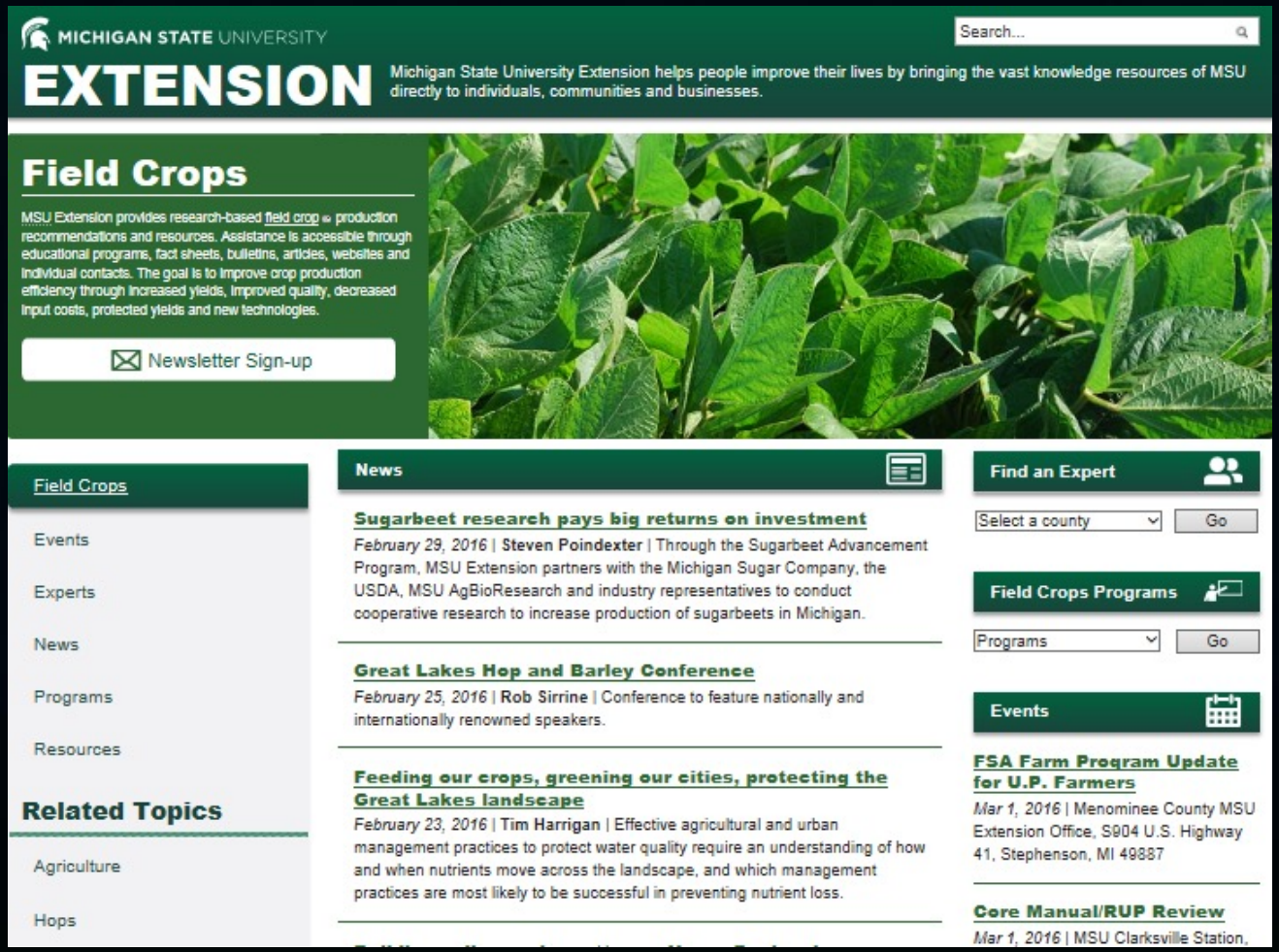
Search: MSU Extension News, agriculture

Articles

Events

Contacts

Sign-up invited



Fusarium head scab forecast

http://www.wheatscab.psu.edu/

MSU wheat variety performance trials

http://www.varietytrials.msu.edu/wheat

Thanks

RUP number:

6 1 9 1 1 -A- 0 4

4 credits

1A,Comm Core, private core

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