Overview of the wheat season, 2009/2010

Martin Nagelkirk, MSU Extension Dec. 2010

Production

The acreage planted to wheat in Michigan was significantly lower in the fall of 2009 due to a delayed soybean harvest, consternation over quality discounts, and a generally reduced level of confidence in the crop's income potential. NASS estimated the planted acreage to be 530,000, some 100,000 below the previous year and the lowest acreage since 2002. The industry was particularly concerned about the decline in soft white wheat acreage, as it headed below the 200,000 acre mark. NASS estimated the crop yield to average 70 bushel per acre (three bushels below the record set in 2006) and the total harvested production to be nearly 35 million bushels.

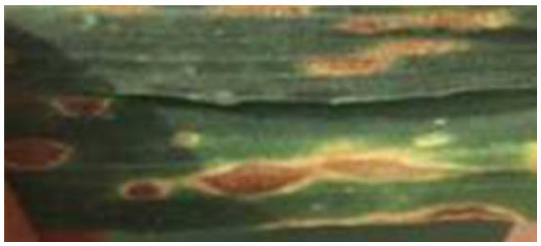
Crop development

Despite most fields being planted relatively late and under unaccommodating weather, there was very little seedling or plant loss prior to green-up, except for some areas in the north central area of the state. In the spring, a relatively warm and dry April led to strong, vigorous, and early maturing stands. Favorable spring conditions also provided for efficient use of fertilizer nitrogen, in contrast to the previous season when excessive rains in April and May caused significant loss in many production areas. Flowering occurred mostly from May 24 to June 6. Harvest started in earnest around July 1 for the southern half of Michigan and the bulk of the state's crop was completed by July 23. This was nearly three weeks earlier than the 2009 harvest.

Diseases

As the crop developed beyond jointing (growth stage 6), powdery mildew became aggressive where there were thick stands of a susceptible variety. Warming temperatures soon curtailed powdery mildew, but encouraged the development of leaf blotch (Stagonospora nodorum) across the entire state. The pathogen thrived under the relatively warm and damp conditions during June and readily made its way up on to the flag leaf. In fact, in some fields it continued to climb to the head causing glume blotch. In addition, there was a sprinkling of leaf rust across the state and isolated cases of striped rust and stem rust. Collectively, foliar diseases likely cost the state's crop at least ten bushels per acre where untreated.

Much of Michigan's wheat began flowering during the week prior to Memorial Day under relatively high temperatures and limited rainfall, prompting many to forego a fungicide treatment for Fusarium head blight. Unfortunately for some, the weather pattern abruptly changed following the May 31 holiday to include above normal rainfall. This opened the door for foliar diseases to progress unchecked and for some late infections of Fusarium head blight.



Stagonospora leaf blotch

Insect pests

Armyworm was again the insect of note for the 2010 season. While most fields were untouched, there were hot spots around the state, including Saginaw and Tuscola counties where some fields lost several bushels to the insect pest. Scattered head clipping was reported across the state. This was attributed to both the true armyworm and grass sawflies (Difonzo, MSU).

Grain quality

Overall, DON levels of the crop were acceptable even though many grain elevators reported receiving occasional loads where DON levels were surprisingly high. The greatest disappointment was experienced by some growers in Isabella and northern Gratiot counties. Here, loads of both red and white wheat tested high for DON, with perhaps 10 to 15 percent of the loads subjected to discounts. Across the state, test weights were generally acceptable, but lower than anticipated. Falling number levels were good, with the exception of a few loads at the tail-end of harvest.

Grain prices

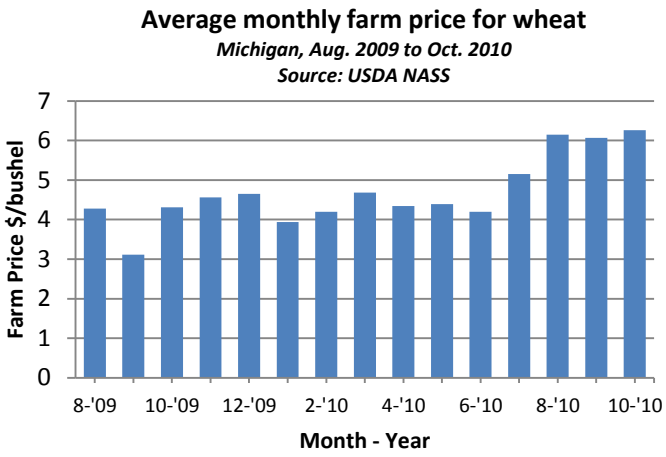
Grain prices were disappointing during the last quarter of 2009. The average price received by Michigan farmers was as low as $3.11 during the month of September, presumably reflecting a weak market and significant quality discounts. The price started to strengthen in July and, by September, the price doubled from a year earlier. The premium for growing soft white winter wheat also increased with forward contracts reflecting a price advantage of approximately $1.50 per bushel above soft red wheat. The figure illustrates monthly average farm prices (USDA NASS) and represents an average across all Michigan wheat classes.

Industry development

To ensure that Michigan continues to have a viable wheat industry, all segments of the industry attempted to advance the production and utilization of wheat. Grain elevators made strides during the past year to improve the reliability of their falling number tests. They invested in training and equipment, and tightened their testing procedures.

Farm Bureau's Commodity and Marketing Committee continued to assist the industry in multiple ways. Most notably, they were instrumental in a national discussion with the USDA's Risk Management Agency to encourage the recognition of low falling numbers as a peril under national crop insurance. This key initiative was partly successful and will continue to be emphasized in the year to come. The group also began exploring the feasibility of a referendum that would generate money for addressing industry issues.

Both the Michigan Millers' Association and the Eastern White Wheat Council continued to play supportive roles ion behalf of the wheat industry and to contribute financially to the



wheat breeding program at Michigan State University.

Michigan State University Extension, in an effort to stem the decline in resources devoted to the wheat industry, assigned a field Extension Educator to work across the state to help facilitate communication within the industry, and to and disseminate production information to growers. This pilot initiative received financial assistance from Project GREEEN, Michigan Crop Improvement Association and Michigan Millers' Association.