Winter Canola: a potential solution for problems in wheat following wheat

Ernst Cebert and Rufina Ward

Department of Biological and Environmental Sciences, Alabama A&M University

The canola industry in Canada with revenue of $6 billion continues to grow and is the primary provider of canola products to the United States. The market share of canola in the United States steadily increased over the past 10 years, while production lags behind with at approximately 1.5 million acres. Where and how can winter canola help farmers in the U.S.? The best example is the state of Oklahoma, where productivity of winter wheat was suffering from decades of continuous wheat following wheat growing practice. The proliferation of weeds, diseases and insects created increasing pressure even on improved wheat cultivars resulting in low yield and steadily decreasing profit. This mono-cropping system is also conducive for new biotypes of Hessian fly to emerge along with weeds developing tolerance to traditional herbicide.

As a solution, Oklahoma State University began to promote rotation with winter canola as an alternative to winter wheat. A program dubbed “OKcanola” which started in 2003 has been a great success, whereby, during the 2010 planting season more than 85,000 acres of winter canola was harvested across the state. The goal in Oklahoma is eventually to have at least a million acre of winter canola in rotation with wheat. Farmers in Oklahoma are increasingly including winter canola in their rotation because the benefits are clearly visible, not only for a better wheat crop the following season, but increased farm income and profitability. Some of the benefits associated with winter canola in Oklahoma as mentioned by the OKcanola program are: “(1) growers have the opportunity to produce a commodity that is tied to a market other than the grain market, since canola is tied closer to the oil-seed market, farmers spread out their economic risk; (2) winter canola interfere with wheat disease and insect cycles and decrease these problems in crops that follow; (3) winter canola rotation has the potential to be a major part of the long-term management strategy for Oklahoma to be a reliable supplier of high quality wheat”.

This same strategy can work for growers in Alabama and the southeast who are having problems with low productivity with wheat because of mono-cropping. Alabama A&M University has been promoting the use of winter canola as an alternative to winter wheat in the northern region
of the state. Since 2007, the number of farmers growing winter canola has increased from one
with 500 acres to more than a dozen with approximately 5,000 acres planted during the 2010-11
growing season. The major factor for this increase is the existence of two companies: AgStrong
LLC, and Resaca Sun, both located in northern Georgia who buys the seeds from local growers.
However, the growers have experienced the same benefits seen elsewhere when canola is
included in rotation management practice. Growers in Elkmont and Tanner, Alabama have
mentioned the improvement of their wheat and soybean crops following winter canola. The most
important benefit, however, as stated by these growers is the increased income in terms of
profitability of winter canola over other traditional crops. Due to increasing interest by growers
in the region, AgStrong LLC plans to build a processing facility in Northern Alabama, so
growers would not have to ship their seeds across the state line.

Noticing the small but significant rise in winter canola in the region, Alabama A&M University
in partnership with several other land-grant institutions in the southeast have been awarded a
grant by the USDA to help increase production acreages of the crop in the region.

For further information, please contact:

Dr. Ernst Cebert, ernst.cebert@aamu.edu, (256) 361-8480

Dr. Rufina Ward, rufina.word@aamu.edu, (256) 372-4244