



UNIVERSITY OF ILLINOIS
EXTENSION

College of Agricultural, Consumer and Environmental Sciences

Dennis Bowman, Extension Educator, Crop Systems
Champaign Extension Center
801 N. Country Fair Drive, Suite E
Champaign IL 61821

Adapt and Survive

“Adapt and survive” sounds like a good motto to live by; it is also one of the general rules of nature. We see it all around us plants and animals that are adapted to the environment do well and if they aren’t adapted they don’t survive very long. Humans have a tendency to try to control their environment and even change it to suit their needs. Sometimes this succeeds, sometimes it doesn’t and often it has unintended consequences.

With both old and new plant breeding techniques, we have created corn hybrids and soybean varieties that are well adapted to Central Illinois conditions. However, when we try to eliminate pest species we are often frustrated by the ability of pests to adapt and survive.

Insects, weeds and diseases can cause farmers major problems, causing crop damage, reduce yields and profits. Profitable farming requires that we manage these pests. In our efforts we must constantly monitor the pests and evaluate all available management strategies.

We are continually reminded of nature’s ability to overcome any single control technique. At the end of the 2010 growing season reports surfaced of a soybean disease, frogeye leafspot, which was resistant to a type of fungicide. The affected area grew in 2011. During this past season, reports from Iowa and then from Northern-Illinois came in of western corn rootworm beetles surviving in corn fields that carried the rootworm resistance Bt gene. This gene was supposed to protect the plants from the beetles. This season also saw the spread of waterhemp that is resistant to the herbicide glyphosate across more of Central-Illinois, and

C:\Users\Fayette County SWCD\AppData\Local\Microsoft\Windows\Temporary Internet Files\Content.IE5\QNIX1GL2\Adapt and Survive.doc

increased reports of resistant Palmer amaranth, a weed that is an even more aggressive cousin of waterhemp.

Farming is a dynamic business and farmers must adapt as well.

Pest resistance issues are going to be one of the focal points of the up-coming Ag-Masters Conference, December 5-6, 2011. Watch for more details soon!