In recent years, genetically modified corn has become a staple crop among American farmers. One of the most common genes engineered into corn is the bacterial Cry1Ab gene. This gene codes for a naturally occurring endotoxin (Bt toxin) that is lethal to the European corn borer insect. It is estimated that 30% of all maize products manufactured in the United States contain this “built-in” pesticide. Attempting to detect the Cry gene within common food products sold at the grocery store is a great way to apply the concept of genes and PCR in an academic setting. Existing student protocols for the detection of the Cry1Ab gene have repeatedly failed at RIT. It is possible that the primers used in these dated protocols are no longer specific for the Cry gene alleles currently used to produce Bt corn. Here we design and optimize new primers sets to allow the robust detection of current Cry gene sequences from DNA extracted directly from today’s consumer corn products.

POSTER PRESENTATION