Scientific Abstract
Despite ample evidence of pork quality variability, at present there are few signals that would incentivize growers to produce higher quality pork. Using split-sample, choice experiment data from a nationwide survey of pork chop eaters, this research determines changes in pork chop demand in response to potential pork quality grading systems based on color scores. Our simulations include novel short-run projections in which the conditional and latent class logit models are inverted to yield inverse demand curves. The inverse demand curves are used to calculate equilibrium prices and pork revenue given a fixed supply of different pork qualities. We supplement these calculations with a more traditional “long run” analysis in which prices are fixed (at projected marginal cost differences) and quantities of different qualities adjust. Compared to the status quo (control) of no quality grades, we find that two grading systems based on alternative nomenclatures (Select, Choice, Prime vs. Good, Better, Best) both have the potential to increase pork chop sales and revenue to the pork industry; however, we also find that if only the highest quality is labeled, revenue could fall as the increase in demand for the higher quality is offset by the fall in demand for the lower qualities. Results also highlight important heterogeneity in consumer preferences, and although sensory studies strongly suggest redder pork chops are more highly preferred, there remains a non-trivial share of consumers who prefer whiter pork even after quality grade labeling.