IT'S A SURE THING...PROBABLY: THE INFLUENCE OF VARIABILITY ON TRIAL PLANNING, DESIGN AND ANALYSIS. Leslie Fuquay, Syngenta Crop Protection, Research Triangle Park, NC.

Graduate students and other researchers are often occupied with specific, comprehensive and complex statistical analyses of their project data. As horizons broaden and career paths advance, it is important not to lose sight of statistical fundamentals. Using objective-based trial planning and design, reducing experimental error and facilitating valid classification of the remaining error will lead to better experiments, less ambiguous outcomes and more straightforward interpretation.