



Understanding mean separation techniques

By Dr. Alex Lindsey, The Ohio State University

| July 21, 2026

Understanding Mean Separation Techniques | CCA Essentials

What are mean separation values, and how can Certified Crop Advisers (CCAs) use them? Being able to interpret mean separation techniques such as least significant difference (LSD), Tukey's honestly significant difference (HSD), and Duncan's test can help CCAs better understand if the yield difference between different treatments or different varieties is true or more likely attributed to chance.

In this video, which is part of the new "[CCA Essentials](#)" series, Dr. Alex Lindsey of The Ohio State University shows how LSD values and other statistical tools can be used to determine with a certain level of confidence if the difference between treatments is significant.

This video corresponds to the Crop Management Performance Objective:
Understand how to use mean separation techniques such as least significant difference (LSD) values to interpret differences among varieties or hybrids.

CCA Essentials

CCA Study Tools

International CCA Exam Performance Objectives

[Back to issue](#)

Text © . The authors. CC BY-NC-ND 4.0. Except where otherwise noted, images are subject to copyright. Any reuse without express permission from the copyright owner is prohibited.