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| **Criteria Category** | **Yield Testing Criteria** | **Yes** | **No** |
| Utilizing Standard Definitions of Yield | What was the percent increase in yield? (X-X%) |  |  |
| Utilizing Standard Definitions of Yield | Did they provide this percent increase in yield as a number within the paper? |  |  |
| Utilizing Standard Definitions of Yield | Did they measure plot yield? (As opposed to single plant yield or grain yield per 1000 plants) |  |  |
| Using Controls | Did they test for yield effects in elite germplasm? |  |  |
| Using Controls | Did they backcross (or do any kind of cross) of their edits into non-transformed germplasm before yield testing? |  |  |
| Using Controls | Did they test for yield effects in a non-transformed wild-type plant? |  |  |
| Using Controls | Did they measure yield in a line containing a null construct? |  |  |
| Using Controls | Did they measure yield in a context relevant to what is commercially expected? (i.e. did they measure hybrids vs. inbred yield; maize = hybrid, wheat = inbred, rice = inbred or hybrid) |  |  |
| Matching On-Farm Practices | Did they test for yield effects in the field? |  |  |
| Matching On-Farm Practices | Did they plant at a standard planting density? |  |  |
| Matching On-Farm Practices | Did they mechanically harvest their fields? |  |  |
| Matching On-Farm Practices | Did they directly plant the seeds in the field or transplant seedlings (YES/NO)? Is this normal (normal/not-normal)? |  |  |
| Matching On-Farm Practices | Did they control for moisture before weighing (grain, leaves) to an industry standard? (maize = 15.5%, wheat = 13.5%, soy = 13-15%) |  |  |
| Sufficient Replication and Experimental Design | Did they have sufficient replication of individuals within an environment (n = number of plants)? Where sufficient >= 20 |  |  |
| Sufficient Replication and Experimental Design | Did they have sufficient plot replication within an environment (p = number of plots)? Where sufficient >= 3. |  |  |
| Sufficient Replication and Experimental Design | Did they replicate their experiments across environments and/or years (n = number years)? |  |  |
| Sufficient Replication and Experimental Design | Were enough site year locations tested? (syc = total number of site-year combinations)? |  |  |
| Sufficient Replication and Experimental Design | Did they consider plant competition in their plot design? |  |  |
| Sufficient Replication and Experimental Design | Did they correct for field effects (BLUPs, BLUEs, fixed effects) in their yield estimates? |  |  |
| Sufficient Replication and Experimental Design | Did they avoid edge effects by only harvesting inner-rows? |  |  |