

## Research recommendations given by Dept. of Agril. Statistics

On the basis of research work carried out under the scheme "Statistical Evaluation of Experimental Variability for Improving Efficiency of Field Experimentation" following recommendations have been made for scientific community.

| Year | Topic  | Scientific Recommendation  |
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| 1995 | Statistical Evaluation of Experimental Variability for Improving Efficiency of Field Experimentation | <ol style="list-style-type: none"> <li>1) The field experiments on maize crop at the Maize Research station, Godhra during kharif season should be conducted in Latin square design with 5-9 treatments and 6 sq.m. plot size <i>i.e.</i> 5 rows each of 2 m length.</li> <li>2) The optimum plot size for field experiments on Guar, Green gram and Black gram is 6 to 9sq.m. and that of Arhar and Gram is 9 to 12 sq.m.</li> <li>3) Minimum four replications are must for better precision of experimental result in pulse crop.</li> <li>4) The upper limit of CV% for accepting the results of field experiments on pulse crop is 23 percent.</li> </ol> |
| 1997 | Plot technique study of arhar and paddy at Derol   | <ol style="list-style-type: none"> <li>1) A plot of 10.8 sq.m. size having shape of 2 m. length (S-N) and 5.4 m. cross width (E-W) is considered as optimum size and shape for Arhar crop field experiments at Derol.</li> <li>2) A plot of 7.2 sq.m. (8 unit) size having shape of 2 m. length (S-N) and 3.6 m. cross width (8 rows) in E-W is optimum size and shape for drilled paddy experiment at Derol.</li> </ol>   |
| 1998 | Plot technique study of arhar at S.K. Nagar  | A plot of 7.2 sq.m. size having shape of 2 m. length (N-S) and 3.6 m. cross width (6 rows in E-W) is optimum size and shape for Arhar crop (narrow distance) field experiments at Aseda, S.K. Nagar.   |
| 1999 | Plot technique study of cotton at Targhadia, Rajkot  | A plot of 10.8 sq.m. size having shape of 2 m.length (N-S) and 5.4 m. cross width (6 row in E-W) is optimum size (Net) and shape for cotton crop experiment at Dry farming research station, Targhadia, Rajkot.  |
| 1999 | Development of yardstick of CV% for vegetable crop experiments                                       | The upper limit of CV% for accepting the results of field experiment on vegetable crop is 23 per cent for yield character  |
| 2000 | Development of yardstick of  | The upper limit of CV% for accepting the results of  |

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|      | CV% for irrigated castor crop experiments   | field experiment on irrigated castor crop is 20 per cent for yield character  |
| 2001 | Plot technique study of cluster bean at S K Nagar   | A plot of 10.8 sq.m. size having shape of 4 m. length (E-W) and 2.7 m. cross width (6 row in E-W) is optimum size (Net) and shape for cluster bean experiment at Pulse research station, Gujarat Agricultural University, S.K. Nagar. |
| 2001 | Development of yardstick of CV% for mustard crop experiments                                  | The yard stick of CV% for accepting the results of Mustard crop experiments is 17 per cent for yield character.   |
| 2003 | Development of yardstick of CV% for cotton crop experiments                                   | The yard stick of CV% for accepting the results of <i>kharif</i> cotton crop experiments is 23 per cent for yield character.  |
| 2005 | Development of yardstick of CV% for wheat crop experiments                                    | The yard stick of CV % for accepting the results of irrigated wheat crop experiment is 12per cent and un irrigated wheat crop experiment is 18 per cent for yield characters.   |
| 2009 | Development of yardstick of CV% for forage crop experiments                                   | The yard stick of CV for accepting the results of forage crop experiment is 14 per cent for green and dry fodder yield character.   |
| 2015 | Development of yardstick of CV% for Safed musali crop experiments                             | The yard stick of CV% for accepting the results of Safed musali crop experiments is 21 per cent for economical yield character.   |
| 2015 | Development of yardstick of CV% for Ashwagandha crop experiments                              | The yard stick of CV% for accepting the results of Ashwagandha crop experiments is 22 per cent for economical yield character.  |
| 2015 | Development of yardstick of CV% for Isabgul crop experiments                                  | The yard stick of CV% for accepting the results of Isabgul crop experiments is 23 per cent for yield character.   |
| 2016 | Development of yardstick of CV% for Arnej center (Bhal and Coastal Zone) crop experiments     | The yard stick of CV for accepting the results of Arnej center (Bhal and Coastal Zone) crop experiment is 20 per cent for yield character.  |
| 2016 | Development of yardstick of CV% for Dhandhuka center (Bhal and Coastal Zone) crop experiments | The yard stick of CV for accepting the results of Dhandhuka center (Bhal and Coastal Zone) crop experiment is 14 per cent for yield character   |
| 2016 | Development of yardstick of CV% for Bhal and Coastal Zone crop experiments                    | The yard stick of CV for accepting the results of Bhal and Coastal Zone crop experiment is 18 per cent for yield character.   |
| 2016 | Development of yardstick of CV% for gram (Bhal and Coastal Zone) crop                         | The yard stick of CV for accepting the results of gram (Bhal and Coastal Zone) crop experiment is 19 per cent for yield character.  |

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| 2016 | Development of yardstick of CV% for wheat (Bhal and Coastal Zone) crop experiments     | The yard stick of CV for accepting the results of wheat (Bhal and Coastal Zone) crop experiment is 15 per cent yield character.   |
| 2016 | Development of yardstick of CV% for cotton (Bhal and Coastal Zone) crop experiments    | The yard stick of CV for accepting the results of cotton (Bhal and Coastal Zone) crop experiment is 21 per cent for yield character.  |
| 2016 | Development of yardstick of CV% for safflower (Bhal and Coastal Zone) crop experiments | The yard stick of CV for accepting the results of safflower (Bhal and Coastal Zone) crop experiment is 24 per cent for yield character.   |
| 2018 | Development of yardstick of CV% for sugarcane crop experiments                         | 1) The yard stick of CV% for accepting the results of Sugarcane crop for agronomical experiment is 12 per cent for yield character for south Gujarat region.<br>2) The yard stick of CV% for accepting the results of Sugarcane crop for varietal trials is 10 per cent for yield character for south Gujarat region. |
| 2019 | Development of yardstick of CV% for Maize crop experiments for Godhra center           | The yard stick of CV% for accepting the results of Maize crop experiments is 17 per cent for yield character.   |
| 2020 | Development of yardstick of CV% for rice crop experiments for Nawagam center           | The yard stick of CV% for accepting the results of Rice crops experiments is 14 per cent for yield character.   |
| 2021 | Development of yardstick of CV% for tobacco crop experiments                           | The yard stick of CV% for accepting the results of tobacco crop experiments is 15 per cent for yield character.   |
| 2023 | Development of yardstick of CV% for Vegetable crop experiments                         | The yard stick of CV for accepting the results of Vegetable crop experiment is 17 per cent yield character.   |
| 2023 | Development of yardstick of CV% for Forage crop experiments                            | The yard stick of CV for accepting the results of forage crop experiment is 14 per cent for green and dry fodder yield character.   |
| 2024 | Brassicaceae Family ontology development   | The scientific community is advised to develop information systems based on Fertilizer application ontology for Cabbage, Cauliflower and Mustard crops of Brassicaceae family developed by Anand Agricultural University, Anand and even extend it further.   |