

Supplementary Table 1 Location and soil properties of the different experimental sites

| Research Centre | Latitude/ | Soil | OC | P | K | pH | EC |
|-------------------------------------|-----------|-------|------|---------|---------|-----|--------|
| | Longitude | type | (%) | (kg/ha) | (kg/ha) | | (dS/m) |
| ICAR-IIWBR, Karnal | 29°68'N | Clay | 0.46 | 20.0 | 239 | 8.2 | 0.28 |
| | 76°99' E | loam | | | | | |
| CCS HAU Hisar | 29°15'N | Sandy | 0.38 | 21 | 308 | 7.8 | 0.22 |
| | 75°70'E | loam | | | | | |
| PAU Ludhiana | 30°90'N | Loamy | 0.47 | 32.5 | 134 | 8.3 | 0.09 |
| | 75°80'E | sand | | | | | |
| RARI Durgapura | 26°84'N | Sandy | 0.21 | 32.6 | 251 | 7.9 | 0.24 |
| | 75°79'E | loam | | | | | |
| RBS College of Agriculture, Agra | 27°18'N | Sandy | 0.35 | 28.9 | 310 | 8.4 | 1.64 |
| | 78°00°E | loam | | | | | |