

Supplementary Table 1 Effect of planting techniques and weed competition treatments on grain yield, straw yield, biological yield and harvest index of wheat

| Treatments                 | Grain yield (kg/ha) |         |      | Straw yield (kg/ha) |         |      | Biological yield (kg/ha) |         |       | Harvest index (%) |         |      |
|----------------------------|---------------------|---------|------|---------------------|---------|------|--------------------------|---------|-------|-------------------|---------|------|
|                            | 2022–23             | 2023–24 | Pool | 2022–23             | 2023–24 | Pool | 2022–23                  | 2023–24 | Pool  | 2022–23           | 2023–24 | Pool |
| Planting technique         |                     |         |      |                     |         |      |                          |         |       |                   |         |      |
| M <sub>1</sub>             | 4651                | 4452    | 4603 | 5723                | 5471    | 5796 | 10791                    | 10498   | 10815 | 44.8              | 41.6    | 42.2 |
| M <sub>2</sub>             | 5039                | 4727    | 4932 | 6290                | 5806    | 6146 | 11702                    | 11464   | 11584 | 45.2              | 42.3    | 44.8 |
| M <sub>3</sub>             | 5161                | 4662    | 4863 | 6147                | 5957    | 5886 | 11552                    | 10505   | 11124 | 44.2              | 43.5    | 43.9 |
| M <sub>4</sub>             | 4437                | 4238    | 4388 | 5704                | 5476    | 5589 | 10506                    | 10358   | 10426 | 42.5              | 40.6    | 43.6 |
| LSD ( $P=0.05$ )           | 1.53                | 0.79    | 1.06 | 1.56                | 2.21    | 1.83 | 3.07                     | NS      | 5.86  | 0.19              | 0.57    | 0.27 |
| Weed competition treatment |                     |         |      |                     |         |      |                          |         |       |                   |         |      |
| T <sub>1</sub>             | 4574                | 4148    | 4412 | 5641                | 5384    | 5712 | 10577                    | 9734    | 10355 | 42.7              | 41.0    | 41.9 |
| T <sub>2</sub>             | 5016                | 4654    | 4885 | 6072                | 5815    | 6143 | 11453                    | 11204   | 11327 | 43.2              | 42.0    | 42.3 |
| T <sub>3</sub>             | 4175                | 3847    | 3961 | 5234                | 4777    | 5207 | 9374                     | 9246    | 9507  | 41.9              | 40.4    | 42.0 |
| T <sub>4</sub>             | 5527                | 5431    | 5529 | 6789                | 6341    | 6465 | 12483                    | 12483   | 12555 | 43.8              | 43.7    | 43.9 |
| LSD ( $P=0.05$ )           | 1.46                | 1.25    | 1.27 | 1.43                | 1.39    | 1.40 | 2.87                     | 9.36    | 5.26  | 0.18              | 0.56    | 0.28 |
| Interaction                | 2.90                | 2.53    | 2.59 | 2.86                | 2.92    | 2.87 | 5.84                     | NS      | NS    | 0.35              | NS      | NS   |

M<sub>1</sub>, 2 rows/bed; M<sub>2</sub>, 3 rows/bed; M<sub>3</sub>, Cross sowing; M<sub>4</sub>, Flat/Line sowing; T<sub>1</sub>, Competition by *Phalaris minor* alone; T<sub>2</sub>, Competition by BLW alone; T<sub>3</sub>, Joint competition; T<sub>4</sub>, No competition.