Table *S*2

Seed bank under different treatments in the winter wheat field in NCP.

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **Weed species (Latin binomial)** | **Family** | **CT-NS** | **CT-CS** | **NT-NS** | **NT-CS** |
| *Setaria viridis* (L.) Beauv. | Poaceae | 1181.10±0.00a | 1837.27±694.42a | 1837.27±572.03a | 2363.20±1202.78a |
| *Digitaria sanguinalis* (L.)Scop. | Poaceae | 25065.60±4887.46a | 2493.44±262.47b | 23884.50±7732.77a | 2624.67±1121.26b |
| *Eleusine indica* (L) Gaertn. | Poaceae | 1181.10±681.91b | 131.23±131.23b | 787.40±393.70a | 131.23±131.23b |
| *Leptochloa chinensis* (L) Nees | Poaceae | / | 131.23±131.23a | 131.23±131.23a | / |
| *Chloris virgata*Sw. | Poaceae | / | 262.47±131.23a | 131.23±131.23a | 524.93±262.47a |
| *Descurainia sophia* (L.) Webb. Ex Prantl | Brassicaceae | / | 131.23±131.23a | / | 1181.10±787.40a |
| *Capsella bursa-pastoris* (L) Medic. | Brassicaceae | 393.70±393.70a | 131.23±131.23a | / | / |
| *Acalypha australis* | Euphorbiaceae | 131.23±131.23a | / | 131.23±131.23a | / |
| *Euphorbia maculata* L. | Euphorbiaceae | / | / | 131.23±131.23 | / |
| *Echinops prostrata* L. | Asteraceae | 4068.24±3479.55a | / | 393.70±393.70a | / |
| *Erigeron canadensis* L. | Asteraceae | / | / | 393.70±227.30a | 656.17±131.23a |
| *Lithospermum arvense* L. | Boraginaceae | 131.23±131.23a | 131.23±131.23a | 393.70±227.30a | 131.23±131.23a |
| *Portulaca oleracea* L. | Portulacaceae | 5774.28±2037.29a | 524.93±131.23c | 2624.67±1049.87ab | 1049.87±262.47b |
| *Chenopodium album* L. | Chenopodiaceae | 262.47±131.23b | 918.64±262.47ab | 393.70±227.30b | 1443.57±262.47a |
| *Lagopsis supina* (Steph. Ex Willd.) | Lamiaceae | 131.23±131.23a | / | 262.47±262.47a | / |
| *Cyperus rotundus* L. | Cyperaceae | / | 262.47±131.23b | 2099.74±656.17a | 1312.34±347.21a |
| *Amaranthus blitum* L. | Amaranthaceae | / | 131.23±131.23a | 262.74±131.23a | / |
| *Abutilon theophrasti* Medicus | Malvaceae | / | 131.23±131.23a | / | 131.23±131.23a |
| *Veronica polita* Fries | Plantaginaceae | / | / | 393.70±227.30 | / |
| *Galium spurium* L. | Rubiaceae | / | / | 131.23±131.23 | / |
| *Humulus scandens* (Lour.) Merr. | Cannabaceae | / | / | 131.23±131.23a | 131.23±131.23a |
| *Convolvulus arvensis* L. | Convolvulaceae | / | / | / | 262.47±262.47 |

CT-NS: conventional tillage with no crop residue, CT-CS: conventional tillage with crop residue, NT-NS: no-till with no crop residue, NT-CS: no-till with crop residue.

The “/” indicates the weed species was not found in the plot.

Different letters indicate a significant difference between the treatments (*p* < 0.05).