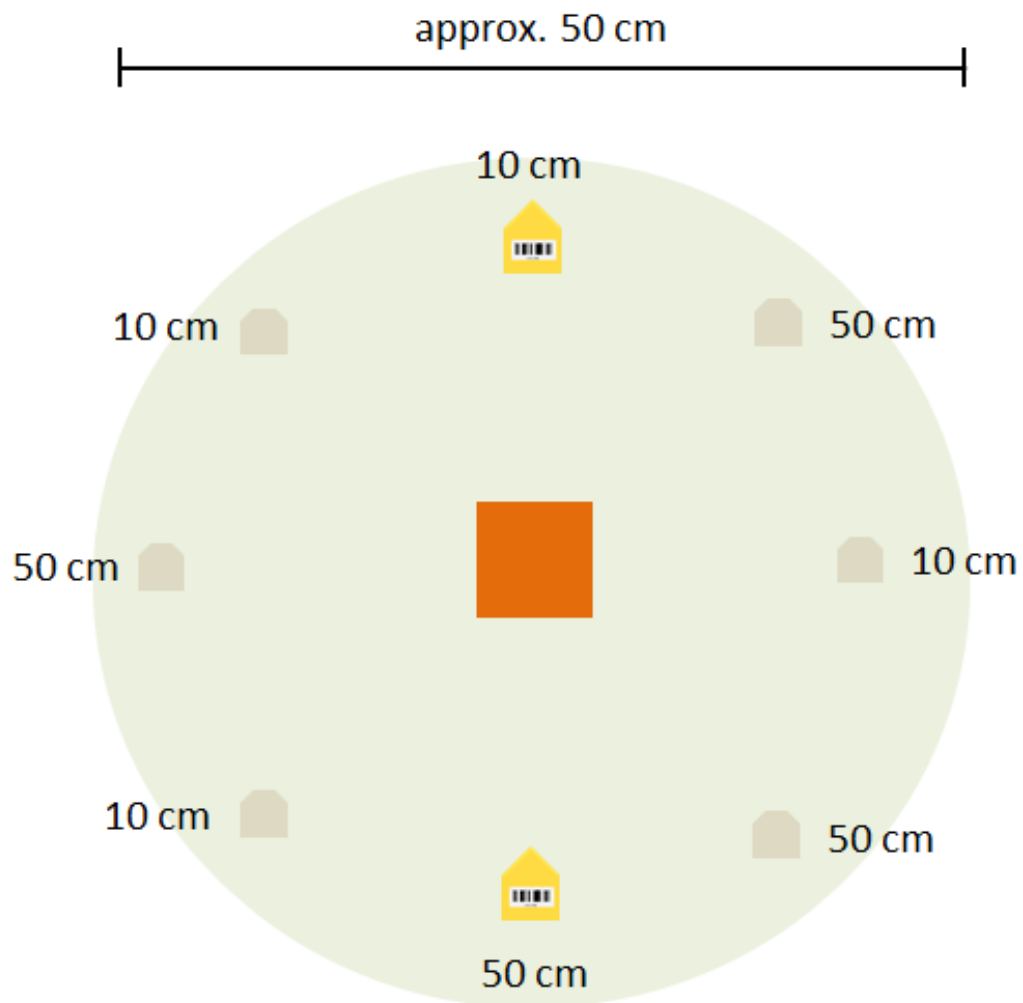


1 Supplement

2 *Table S 1: Tea mass loss, annual mean temperature, temperature amplitude and cumulative degree days at every site, land-*
 3 *use type and depth. Land-use abbreviations: CM = Cropland / Market Garden, G = Grassland, F = Forest, y = younger, o =*
 4 *older (applies at sites with two CM plots)*

| Site | Land-use | Depth [cm] | Tea bags recovered | Mean tea loss [%] | Annual mean temperature [°C] | Temperature amplitude | Cumulative degree days |
|------|----------|------------|--------------------|-------------------|------------------------------|-----------------------|------------------------|
| CD | CM | 10 | 3 | 61.3 ± 6.6 | 1.15 | 50.01 | 2013 |
| | | 50 | 3 | 53.5 ± 4.4 | 1.33 | 32.80 | 1711 |
| | F | 10 | 3 | 73.1 ± 3.8 | 0.33 | 45.69 | 1643 |
| | | 50 | 3 | 62.6 ± 4.3 | 0.53 | 27.11 | 1216 |
| | G | 10 | 3 | 68.7 ± 2.1 | 1.67 | 47.46 | 1982 |
| | | 50 | 3 | 53.7 ± 5.8 | 1.57 | 30.49 | 1626 |
| DR | F | 10 | 3 | 65.7 ± 4.2 | 0.55 | 17.73 | 763 |
| | | 50 | 3 | 55.9 ± 3.7 | 0.73 | 8.620 | 444 |
| | G | 10 | 3 | 67.4 ± 4.4 | 3.55 | 26.93 | 1727 |
| | | 50 | 3 | 54.1 ± 0.4 | 3.24 | 17.43 | 1387 |
| EF | CM | 10 | 3 | 82.6 ± 6.6 | 3.35 | 29.08 | 1625 |
| | | 50 | 3 | 67.1 ± 5.5 | 3.02 | 18.62 | 1277 |
| | F | 10 | 3 | 66.0 ± 7.0 | 1.66 | 27.84 | 1200 |
| | | 50 | 3 | 51.1 ± 0.7 | 1.51 | 15.50 | 851 |
| | G | 10 | 3 | 59.1 ± 2.9 | 2.65 | 34.54 | 1665 |
| | | 50 | 3 | 45.4 ± 1.1 | 2.66 | 16.99 | 1183 |
| EG | F | 10 | 2 | 73.3 ± 5.0 | -0.66 | 44.42 | 1298 |
| | | 50 | 3 | 86.1 ± 1.8 | 1.13 | 28.62 | 337 |
| | G | 10 | 2 | 76.6 ± 3.1 | 3.04 | 43.79 | 1973 |
| | | 50 | 3 | 73.5 ± 3.6 | 2.87 | 31.48 | 1666 |
| GV | CM | 10 | 2 | 55.8 ± 4.3 | 1.99 | 41.48 | 1650 |
| | | 50 | 3 | 47.8 ± 5.7 | 2.46 | 21.36 | 1327 |
| | F | 10 | 3 | 64.6 ± 2.8 | 1.52 | 24.80 | 1106 |
| | | 50 | 3 | 51.7 ± 2.8 | 1.75 | 13.43 | 881 |
| | G | 10 | 3 | 70.1 ± 1.3 | 3.22 | 32.01 | 1680 |
| | | 50 | 3 | 48.8 ± 3.6 | 3.22 | 19.42 | 1466 |
| KK | CM | 10 | 3 | 75.4 ± 1.7 | 3.09 | 34.56 | 1927 |
| | | 50 | 2 | 73.0 ± 1.9 | 2.69 | 23.63 | 1584 |
| | F | 10 | 2 | 69.9 ± 1.9 | -1.08 | 27.38 | 962 |
| | | 50 | 2 | 55.6 ± 2.8 | -0.96 | 19.14 | 682 |
| KL | CM | 10 | 3 | 76.2 ± 3.9 | 1.89 | 34.66 | 1633 |
| | | 50 | 3 | 63.2 ± 7.8 | 1.08 | 23.66 | 1187 |
| | F | 10 | 3 | 64.3 ± 1.5 | 0.21 | 14.91 | 479 |
| | | 50 | 3 | 55.7 ± 2.7 | -0.24 | 3.788 | 69 |
| LR | F | 10 | 2 | 74.2 ± 0.4 | 1.13 | 28.12 | 1190 |
| | | 50 | 3 | 47.3 ± 1.4 | 1.15 | 15.51 | 885 |
| | CMo | 10 | 3 | 77.1 ± 10.3 | 2.86 | 30.53 | 1643 |
| | | 50 | 3 | 56.4 ± 1.0 | 3.04 | 15.92 | 1303 |

| | | | | | | | |
|----|-----------------|----|---|------------|-------|-------|------|
| | CM _y | 10 | 3 | 81.3 ± 4.6 | 3.29 | 40.50 | 1998 |
| | | 50 | 2 | 72.4 ± 0.1 | 3.02 | 20.14 | 1515 |
| MG | CM | 10 | 3 | 74.2 ± 6.1 | 3.76 | 31.49 | 1777 |
| | | 50 | 2 | 61.1 ± 1.9 | 3.42 | 20.25 | 1411 |
| | F | 10 | 3 | 69.1 ± 3.6 | 1.28 | 18.52 | 814 |
| | | 50 | 3 | 50.3 ± 0.9 | 1.01 | 10.50 | 527 |
| | G | 10 | 3 | 67.2 ± 3.9 | 2.86 | 25.12 | 1323 |
| | | 50 | 2 | 17.6 ± 3.3 | 2.53 | 17.40 | 1094 |
| NB | F | 10 | 3 | 70.2 ± 3.4 | 1.79 | 22.13 | 1145 |
| | | 50 | 3 | 57.7 ± 4.5 | 1.81 | 12.13 | 885 |
| | G | 10 | 2 | 59.3 ± 3.9 | 3.85 | 20.99 | 1506 |
| | | 50 | 3 | 48.0 ± 6.5 | 3.69 | 14.53 | 1358 |
| PC | F | 10 | 2 | 74.6 ± 7.8 | -1.68 | 36.93 | 1255 |
| | | 50 | 3 | 70.6 ± 1.9 | -0.90 | 20.10 | 723 |
| | G | 10 | 3 | 76.1 ± 4.4 | 1.22 | 47.31 | 2174 |
| | | 50 | 3 | 80.8 ± 2.1 | 1.40 | 31.95 | 1785 |
| RC | CM | 10 | 3 | 72.8 ± 4.8 | 3.52 | 34.27 | 1805 |
| | | 50 | 3 | 60.8 ± 2.7 | 2.81 | 17.75 | 1289 |
| | F | 10 | 3 | 60.1 ± 1.6 | 0.70 | 21.11 | 856 |
| | | 50 | 3 | 49.2 ± 1.2 | 0.30 | 10.55 | 430 |
| RF | CM | 10 | 3 | 72.4 ± 1.0 | 3.95 | 45.11 | 1916 |
| | | 50 | 3 | 67.0 ± 8.9 | 3.79 | 22.91 | 1562 |
| | F | 10 | 3 | 84.9 ± 3.7 | 1.25 | 27.07 | 1022 |
| | | 50 | 3 | 52.7 ± 4.8 | 1.20 | 14.16 | 680 |
| SI | CM | 10 | 3 | 73.2 ± 2.9 | 1.94 | 30.85 | 1560 |
| | | 50 | 3 | 54.1 ± 2.3 | 2.23 | 18.30 | 1307 |
| | F | 10 | 3 | 70.2 ± 5.0 | 0.16 | 21.65 | 890 |
| | | 50 | 3 | 48.0 ± 6.5 | -0.23 | 10.85 | 365 |
| TH | CM | 10 | 2 | 69.1 ± 0.1 | 3.83 | 24.74 | 1604 |
| | | 50 | 3 | 57.4 ± 1.1 | 3.32 | 14.81 | 1248 |
| | F | 10 | 3 | 70.3 ± 4.5 | 1.46 | 17.28 | 962 |
| | | 50 | 3 | 52.7 ± 0.4 | 0.97 | 6.957 | 412 |
| | G | 10 | 3 | 59.5 ± 1.3 | 4.03 | 22.28 | 1607 |
| | | 50 | 3 | 53.6 ± 0.5 | 3.50 | 14.42 | 1309 |



5
 6 *Figure S 1: Schematic sketch of the arrangement of the tea bags (grey hexagons) and temperature loggers (yellow*
 7 *pentagons). The equipment was placed circular around and attached to a metal plate (red)*