|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **Species** | **Date** | **PIabs** | **SD** | **S** | **PItot** | **SD** | **S** | **10 RC/ABS** | **SD** | **S** | **PhiP0** | **SD** | **S** | **Psi0** | **SD** | **S** | **PhiE0** | **SD** | **S** | **PhiD0** | **SD** | **S** | **DeltaR0** | **SD** | **S** | **VJ(3ms)** | **SD** | **S** | Chl | **SD** | **S** |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| **Q. ilex** | **27.06.2016** | 63.41 | 27.08 |  | 31.83 | 14.84 |  | 11.10 | 0.99 |  | 0.82 | 0.01 |  | 0.54 | 0.07 |  | 0.44 | 0.06 |  | 0.18 | 0.01 |  | 0.33 | 0.04 |  | 0.51 | 0.06 |  | 13.81 | 4.34 |  |
|  | **12.07.2016** | 82.20 | 32.03 |  | 35.48 | 18.42 |  | 12.46 | 1.32 |  | 0.82 | 0.01 |  | 0.57 | 0.07 |  | 0.47 | 0.06 |  | 0.18 | 0.01 |  | 0.32 | 0.06 |  | 0.49 | 0.06 |  | 15.68 | 5.43 |  |
|  | **26.07.2016** | 100.80 | 31.30 |  | 46.26 | 22.52 |  | 13.21 | 1.07 |  | 0.82 | 0.01 |  | 0.60 | 0.06 |  | 0.50 | 0.05 |  | 0.17 | 0.01 |  | 0.31 | 0.06 |  | 0.51 | 0.06 |  | 15.83 | 5.08 |  |
|  | **11.08.2016** | 100.70 | 50.15 |  | 48.50 | 27.56 |  | 12.28 | 2.61 |  | 0.82 | 0.01 |  | 0.60 | 0.12 |  | 0.49 | 0.10 |  | 0.18 | 0.01 |  | 0.33 | 0.06 |  | 0.47 | 0.11 |  | 14.56 | 4.37 |  |
|  | **29.08.2016** | 77.82 | 42.76 |  | 39.01 | 23.64 |  | 11.81 | 2.88 |  | 0.82 | 0.01 |  | 0.55 | 0.11 |  | 0.45 | 0.09 |  | 0.18 | 0.01 |  | 0.34 | 0.08 |  | 0.51 | 0.09 |  | 15.66 | 4.05 |  |
|  | **13.09.2016** | 90.50 | 39.63 |  | 40.50 | 24.14 |  | 12.65 | 2.24 |  | 0.82 | 0.01 |  | 0.59 | 0.08 |  | 0.48 | 0.07 |  | 0.18 | 0.01 |  | 0.31 | 0.07 |  | 0.48 | 0.07 |  | 15.31 | 3.99 |  |
|  | **24.09.2016** | 83.08 | 38.69 |  | 46.51 | 33.46 |  | 12.96 | 2.35 |  | 0.81 | 0.01 |  | 0.57 | 0.08 |  | 0.47 | 0.07 |  | 0.19 | 0.01 |  | 0.34 | 0.09 |  | 0.48 | 0.08 |  | 14.91 | 4.10 |  |
| **Q. pub.** | **27.06.2016** | 70.75 | 18.47 |  | 50.62 | 8.86 | x | 12.58 | 1.08 |  | 0.82 | 0.01 |  | 0.55 | 0.04 |  | 0.45 | 0.03 |  | 0.18 | 0.01 |  | 0.42 | 0.04 |  | 0.51 | 0.04 |  | 14.53 | 1.89 |  |
|  | **12.07.2016** | 69.30 | 18.64 |  | 46.81 | 14.11 |  | 13.17 | 0.99 |  | 0.82 | 0.01 |  | 0.53 | 0.04 |  | 0.43 | 0.04 |  | 0.18 | 0.01 |  | 0.40 | 0.03 |  | 0.53 | 0.04 |  | 13.77 | 1.99 |  |
|  | **26.07.2016** | 69.35 | 10.41 |  | 41.42 | 8.18 |  | 12.62 | 0.63 |  | 0.84 | 0.01 | x | 0.52 | 0.04 |  | 0.43 | 0.02 |  | 0.16 | 0.01 | x | 0.34 | 0.05 |  | 0.54 | 0.02 |  | 14.59 | 3.25 | x |
|  | **11.08.2016** | 63.24 | 24.50 |  | 32.77 | 11.99 |  | 11.64 | 1.78 |  | 0.83 | 0.01 |  | 0.54 | 0.08 |  | 0.43 | 0.04 |  | 0.17 | 0.01 |  | 0.37 | 0.10 |  | 0.54 | 0.04 |  | 13.82 | 2.49 |  |
|  | **29.08.2016** | 38.77 | 17.48 |  | 21.48 | 11.37 |  | 9.83 | 1.69 |  | 0.81 | 0.01 | \* | 0.47 | 0.05 |  | 0.38 | 0.05 |  | 0.19 | 0.01 |  | 0.35 | 0.04 |  | 0.59 | 0.05 |  | 13.02 | 2.10 |  |
|  | **13.09.2016** | 63.48 | 13.77 |  | 34.47 | 10.03 |  | 12.52 | 0.94 |  | 0.82 | 0.01 |  | 0.52 | 0.04 |  | 0.43 | 0.03 |  | 0.18 | 0.01 |  | 0.35 | 0.05 |  | 0.54 | 0.03 |  | 11.27 | 2.35 | \*\* |
|  | **24.09.2016** | 33.20 | 6.00 |  | 21.02 | 3.63 | \* | 11.20 | 1.03 |  | 0.79 | 0.01 | \*\*\* | 0.44 | 0.03 |  | 0.35 | 0.03 |  | 0.21 | 0.01 | \*\*\* | 0.39 | 0.03 |  | 0.62 | 0.03 |  | 11.51 | 2.75 | \*\* |
| **Q. fra.** | **27.06.2016** | 61.54 | 7.24 |  | 39.38 | 9.68 |  | 11.33 | 0.81 |  | 0.83 | 0.01 |  | 0.55 | 0.05 |  | 0.44 | 0.02 |  | 0.17 | 0.01 |  | 0.38 | 0.05 |  | 0.51 | 0.03 | x | 18.03 | 4.34 |  |
|  | **12.07.2016** | 63.86 | 19.38 |  | 44.19 | 11.55 |  | 12.28 | 1.10 |  | 0.83 | 0.01 |  | 0.51 | 0.05 |  | 0.42 | 0.04 |  | 0.17 | 0.01 |  | 0.41 | 0.03 |  | 0.55 | 0.04 |  | 15.48 | 2.68 |  |
|  | **26.07.2016** | 85.59 | 30.97 | x | 47.31 | 17.75 |  | 12.64 | 1.58 |  | 0.84 | 0.01 | x | 0.55 | 0.06 |  | 0.46 | 0.05 |  | 0.16 | 0.01 |  | 0.36 | 0.04 |  | 0.51 | 0.06 | x | 16.19 | 3.47 | x |
|  | **11.08.2016** | 43.23 | 11.97 |  | 29.23 | 9.07 |  | 10.15 | 1.21 |  | 0.83 | 0.01 |  | 0.47 | 0.03 |  | 0.39 | 0.03 |  | 0.17 | 0.01 |  | 0.40 | 0.02 |  | 0.58 | 0.04 |  | 14.83 | 3.73 |  |
|  | **29.08.2016** | 28.80 | 12.76 |  | 18.22 | 7.98 |  | 8.82 | 1.51 |  | 0.81 | 0.02 | \*\* | 0.43 | 0.04 |  | 0.34 | 0.04 |  | 0.20 | 0.02 |  | 0.39 | 0.02 |  | 0.62 | 0.03 |  | 11.23 | 1.51 | \*\*\* |
|  | **13.09.2016** | 37.72 | 12.02 |  | 22.91 | 7.06 |  | 10.59 | 1.05 |  | 0.82 | 0.01 |  | 0.43 | 0.04 |  | 0.35 | 0.03 |  | 0.18 | 0.01 |  | 0.38 | 0.03 |  | 0.62 | 0.03 |  | 12.32 | 2.92 | \*\*\* |
|  | **24.09.2016** | 20.49 | 8.36 | \* | 28.76 | 5.91 |  | 10.66 | 1.08 |  | 0.82 | 0.01 |  | 0.45 | 0.03 |  | 0.37 | 0.02 |  | 0.18 | 0.01 |  | 0.40 | 0.03 |  | 0.67 | 0.03 | \* | 10.42 | 2.41 | \*\*\* |

Table S1: OJIP-test parameters of the three oak species over time. Data are means of n=7 (Chl: n = 18). SD indicated. Where indicated by asterisks in column S (for significance), data differ significantly from the value marked by an x at p < 0.05 (\*). p < 0.01 (\*\*) or p < 0.001 (\*\*\*).