Table S2. Tests of fixed-effects for site 2 (First experiment) according to the adequacy of the model and adjusted means (± standard error) for the interaction between sampling date and treatment.

|  |  |  |
| --- | --- | --- |
| Source | F-value | p-value |
| (Intercept) | 176.98 | <0.0001 |
| Sampling date (SD)  | 18.57 | <0.0001 |
| Treatment (T)  | 9.08 | <0.0001 |
| SD\*T | 1.81 | 0.009 |
| Sampling Date | Treatment | Adjusted mean |
| 07/01/2016 | ammonium nitrate | 223.7 ± 72.4 *a* |
| 21/12/2015 | ammonium nitrate | 221.5 ± 50.1 *a* |
| 28/12/2015 | high urea | 191.9 ± 34.6 *a* |
| 21/12/2015 | high urea | 188.5 ± 61.3 *a* |
| 11/12/2015 | ammonium nitrate | 175.9 ± 28.9 *a* |
| 28/12/2015 | ammonium nitrate | 142.2 ± 34.6 *a* |
| 07/01/2016 | high urea | 118.7 ± 72.4 *ab* |
| 28/01/2016 | ammonium nitrate | 116.2 ± 17.4 *ab* |
| 21/12/2015 | low urea | 106.3 ± 50.1 *ab* |
| 11/12/2015 | high urea | 101.1 ± 35.5 *ab* |
| 28/12/2015 | low urea | 97.6 ± 34.6 *ab* |
| 11/12/2015 | low urea | 94.5 ± 35.5 *ab* |
| 19/02/2016 | ammonium nitrate | 88.2 ± 22.7 *ab* |
| 28/12/2015 | without fertilizer  | 88.1 ± 34.6 *ab* |
| 05/02/2016 | high urea | 85.8 ± 24.2 *ab* |
| 07/01/2016 | low urea | 78.7 ± 59.1 *ab* |
| 11/12/2015 | without fertilizer  | 71.3 ± 35.5 *ab* |
| 05/02/2016 | ammonium nitrate | 68.7 ± 29.6 *ab* |
| 19/02/2016 | high urea | 52.9 ± 22.7 *ab* |
| 07/01/2016 | without fertilizer  | 48.7 ± 59.1 *ab* |
| 28/01/2016 | high urea | 44.2 ± 17.4 *ab* |
| 19/02/2016 | low urea | 40.1 ± 22.7 *ab* |
| 21/12/2015 | without fertilizer  | 38.8 ± 61.3 *ab* |
| 29/09/2015 | low urea | 28.9 ± 4.0 *b* |
| 29/09/2015 | without fertilizer  | 28.9 ± 4.0 *b* |
| 29/09/2015 | high urea | 28.9 ± 4.0 *b* |
| 29/09/2015 | ammonium nitrate | 28.9 ± 4.0 *b* |
| 28/01/2016 | without fertilizer  | 27.9 ± 17.4 *b* |
| 19/02/2016 | without fertilizer  | 26.4 ± 22.7 *b* |
| 05/02/2016 | low urea | 20.6 ± 29.6 *b* |
| 21/07/2016 | high urea | 20.6 ± 5.6 *b* |
| 21/07/2016 | without fertilizer  | 19.6 ± 4.6 *b* |
| 05/02/2016 | without fertilizer  | 19.6 ± 24.2 *b* |
| 23/10/2015 | low urea | 18.7 ± 14.4 *b* |
| 23/10/2015 | high urea | 18.7 ± 14.4 *b* |
| 23/10/2015 | ammonium nitrate | 18.7 ± 14.4 *b* |
| 23/10/2015 | without fertilizer  | 18.7 ± 14.4 *b* |
| 28/01/2016 | low urea | 17.9 ± 21.3 *b* |
| 15/04/2016 | high urea | 16.4 ± 3.0 *b* |
| 15/04/2016 | ammonium nitrate | 15.7 ± 3.0 *b* |
| 14/06/2016 | without fertilizer  | 13.8 ± 3.7 *b* |
| 14/06/2016 | high urea | 8.7 ± 3.7 *b* |
| 14/06/2016 | ammonium nitrate | 6.6 ± 3.7 *b* |
| 15/04/2016 | without fertilizer  | 5.5 ± 3.0 *b* |
| 21/07/2016 | ammonium nitrate | 5.4 ± 4.6 *b* |
| 15/04/2016 | low urea | 5.0 ± 3.0 *b* |
| 21/07/2016 | low urea | 3.5 ± 4.6 *b* |
| 14/06/2016 | low urea | 2.9 ± 3.7 *b* |
| 25/08/2015 | high urea | -4.4 ± 10.8 *b* |
| 25/08/2015 | low urea | -4.4 ± 10.8 *b* |
| 25/08/2015 | without fertilizer  | -4.4 ± 10.8 *b* |
| 25/08/2015 | ammonium nitrate | -4.4 ± 10.8 *b* |

Different letters indicate significant differences among mean values for the interaction between treatment and gas sampling date according to ANOVA and Fisher’test at 0.05 level.