**Supporting Information 5**

**5.1 Effect of CO2 growth concentration on gas production within taxa**

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|  | a+b (maximal gas production; ml/200 mg DM) | | | | k (gas production rate; %/h) | | | |
| ppm CO2 | 400 | 800 | 1200 | 2000 | 400 | 800 | 1200 | 2000 |
| *E. hyemale* | 69.1 | 70.8 | 72.4 | 68.1 | 0.115 | 0.103 | 0.112 | 0.105 |
| *R. acris* | 57.4 b | 60.0 ab | 64.9a | 57.3 b | 0.116 | 0.117 | 0.121 | 0.144 |
| *P. vulgare* | 64.0a | 57.6ab | 57.4ab | 51.2b | 0.0545 | 0.0612 | 0.0438 | 0.0498 |
| *M. glyptostroboides* | 59.6ab | 49.5c | 66.6a | 52.8bc | 0.0759 | 0.0643 | 0.0762 | 0.0546 |
| *G. biloba* | 42.7b | 36.8b | 62.0a | 42.1b | 0.0671a | 0.0402ab | 0.0412 ab | 0.0298 b |
| *A. araucana* | 34.2ab | 29.8b | 37.7a | 28.3b | 0.0320 | 0.0593 | 0.0366 | 0.0496 |

Maximal gas production and gas production rate at each CO2 growth concentration were compared for each taxon. Within a row, i.e. for each taxon, means marked with a different letter are significantly different. Values with the same letter (or none) are not significantly different.