# Supplementary materials

Table S1. Mesocosm experiment. Models obtained by stepwise regression approximating plantain, ryegrass or total biomass N yield (g m-2) of day 116 (4th harvest). PLDMY = plantain dry matter yield. RGDMY = ryegrass dry matter yield. (R)SE = (residual) standard error.

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| regressor | intercept SE *p*-value | PLDMYSE *p*-value | PLDMY2SE *p*-value | RGDMYSE *p*-value | RSE |
| plantain N yield | 0.24 | 1.41 ∙ 10-2 | 3.73 ∙ 10-5 |  | 0.34 |
|  | 0.26 | 0.53 ∙ 10-2 | 2.15 ∙ 10-5 |  |  |
|  | 0.366 | 0.014 | 0.098 |  |  |
| ryegrass N yield | 0.46 |  |  | 1.51 ∙ 10-2 | 0.52 |
|  | 0.41 |  |  | 0.18 ∙ 10-2 |  |
|  | 0.269 |  |  | <0.001 |  |
| total biomass N yield | 0.39 | 1.94 ∙ 10-2 |  | 1.60 ∙ 10-2 | 0.59 |
|  | 0.7 | 0.36 ∙ 10-2 |  | 0.27 ∙ 10-2 |  |
|  | 0.586 | <0.001 |  | <0.001 |  |

Table S2. Field experiment. Models obtained by stepwise regression approximating plantain and total grasses N yield per harvest (g m-2). PLDMY = plantain dry matter yield, GDMY = grasses dry matter yield, (R)SE = (residual) standard error.

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| harvest | plantain N yield / grasses N yield | interceptSE*p*-value | PLDMYSE*p*-value | GDMYSE*p*-value | RSE |
| 1 | plantain | -0.33 | 2.69 ∙ 10-2 |  | 0.17 |
|  |  | 0.17 | 1.48 ∙ 10-3 |  |  |
|  |  | 0.072 | <0.001 |  |  |
| 1 | grasses | 1.04 |  | 2.31 ∙ 10-2 | 0.35 |
|  |  | 0.22 |  | 8.70 ∙ 10-4 |  |
|  |  | <0.001 |  | <0.001 |  |
| 2 | plantain | -0.09 | 2.18 ∙ 10-2 |  | 0.30 |
|  |  | 0.13 | 8.21 ∙ 10-4 |  |  |
|  |  | 0.512 | <0.001 |  |  |
| 2 | grasses | 0.92 | -6.50 ∙ 10-3 | 2.38 ∙ 10-2 | 0.64 |
|  |  | 1.08 | 3.04 ∙ 10-3 | 4.89 ∙ 10-3 |  |
|  |  | 0.409 | 0.049 | <0.001 |  |
| 3 | plantain | 0.35 | 2.16 ∙ 10-2 |  | 0.37 |
|  |  | 0.20 | 9.40 ∙ 10-4 |  |  |
|  |  | 0.107 | <0.001 |  |  |
| 3 | grasses | 0.03 |  | 3.25 ∙ 10-2 | 0.10 |
|  |  | 0.07 |  | 8.35 ∙ 10-4 |  |
|  |  | 0.710 |  | <0.001 |  |
| 4 | plantain | -0.09 | 2.80 ∙ 10-2 |  | 0.34 |
|  |  | 0.56 | 2.74 ∙ 10-3 |  |  |
|  |  | 0.873 | <0.001 |  |  |
| 4 | grasses | -0.06 | 3.49 ∙ 10-4 | 4.22 ∙ 10-2 | 0.06 |
|  |  | 0.07 | 1.76 ∙ 10-4 | 1.19 ∙ 10-3 |  |
|  |  | 0.459 | 0.066 | <0.001 |  |
| 5 | plantain | 0.12 | 3.28 ∙ 10-2 |  | 0.08 |
|  |  | 0.06 | 9.29 ∙ 10-4 |  |  |
|  |  | 0.079 | <0.001 |  |  |
| 5 | grasses | 0.03 |  | 3.92 ∙ 10-2 | 0.09 |
|  |  | 0.06 |  | 8.18 ∙ 10-4 |  |
|  |  | 0.550 |  | <0.001 |  |