**Supplementary Materials**

Optimizing rainfed rice productivity in Madagascar: Combinatory design of organic and mineral fertilizing resources assemblage

**Authors**

Manoa Raminoarison1, Benoît Jaillard2, Tantely Razafimbelo1, Koloina Rahajaharilaza1, Eric Blanchart2, Jean Trap2

1 Laboratoire des Radio Isotopes, BP 3383, Route d’Andraisoro, Antananarivo 101, Madagascar

2 Eco&Sols, Univ Montpellier, IRD, INRA, CIRAD, Montpellier SupAgro, Montpellier, France

**2023**

**Table S1**. Dry matter, ash content (Ash), contents of total carbon (C), nitrogen (N), phosphorus (P), phosphorus pentoxide (P2O5), sulphur (S), potassium (K), potassium oxide (K2O), calcium (Ca), magnesium (Mg), C:N ratio, pH for the seventeen organic and mineral fertilizing resources.

|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
|  | **Dry matter** |  | **Ash** | **C** | **N** | **P** | **P2O5** | **S** | **K** | **K2O** | **Ca** | **Mg** | **C:N ratio** | **pH** |
|  | **g kg-1** |  |  |  | **g kg-1 DM** | - | - |
| **ManI** | 360 |  | 703 | 288 | 21.60 | 0.96 |  2.2 | 3.00 |  4.50 |  5.4 |  1.50 |  1.09 |  13 |  8 |
| **ManV** | 500 |  | 597 | 214 | 18.68 | 2.96 |  6.8 | 2.45 | 22.10 |  26.6 |  7.57 |  4.52 |  11 |  9 |
| **KM** | 930 |  | 659 | 140 | 10.32 | 1.57 |  3.6 | 1.51 |  6.88 |  8.3 |  3.56 |  2.57 |  14 |  9 |
| **ComM** | 840 |  | 723 | 166 | 13.57 | 4.75 |  10.9 | 1.14 |  5.26 |  6.3 |  44.03 |  9.10 |  12 |  8 |
| **ComT** | 940 |  | 800 | 113 |  5.98 | 3.72 |  8.5 | 2.04 |  2.60 |  3.1 |  8.95 |  1.88 |  19 |  8 |
| **VermT** | 460 |  | 515 | 231 | 19.99 | 3.75 |  8.6 | 3.04 |  17.05 |  20.5 |  7.58 |  3.82 |  12 |  8 |
| **VermV** | 950 |  | 667 | 134 | 11.73 |  2.00 |  4.6 | 1.94 |  3.62 |  4.4 |  4.84 |  2.98 |  11 |  7 |
| **Tar** | 760 |  | 846 |  72 |  4.10 | 3.82 |  8.7 |  0.10 |  4.83 |  5.8 |  28.34 |  2.90 |  17 |  8 |
| **HornZ** | 890 |  |  77 | 460 |  154.98 | 1.18 |  2.7 |  31.10 |  0.52 |  0.6 |  3.42 |  0.37 |  3 |  6 |
| **AshE** | 980 |  | 902 |  63 |  0.48 |  39.07 |  89.5 | 0.99 |  84.47 | 101.8 |  84.36 | 22.13 | 132 | 11 |
| **AshH** | 980 |  | 915 |  32 |  1.92 |  1.24 |  2.8 | 0.91 |  6.93 |  8.3 |  1.61 |  0.76 |  16 |  8 |
| **DroG** | 810 |  | 784 |  45 | 12.58 |  68.47 | 156.8 |  45.93 |  2.20 |  2.7 |  61.68 |  4.43 |  4 |  6 |
| **DroP** | 440 |  | 316 | 298 | 21.10 |  15.50 |  35.5 | 6.63 |  12.00 |  14.5 |  37.30 |  4.40 |  14 |  6 |
| **SheF** | 780 |  | 625 | 121 | 11.33 |  11.99 |  27.5 | - |  3.40 |  4.1 | 115.00 | 13.90 |  11 |  8 |
| **Hyp** | 880 |  | 959 |  3 |  0.37 |  82.85 | 189.8 | 0.21 |  0.32 |  0.4 |  79.19 |  1.70 |  9 |  8 |
| **Dol** | 990 |  | 981 | 102 |  0.02 |  0.02 |  0 | - |  0.05 |  0.1 | 191.25 | 73.41 | - |  9 |
| **NPK** | - |  | - | - |  110 |  180 | 412.3 | - |  70 |  84.3 | - | - | - | - |