|  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **Specie** | **Family** | **Growth form** | **Control** | | | **Removal of needles** | | | **Fire** | | |
| **Before** | **4 Months** | **30 Months** | **Before** | **4 Months** | **30 Months** | **Before** | **4 Months** | **30 Months** |
| *Annona coriacea* Mart. | Annonaceae | Tree | 2 | 2 | 2 |  |  | 1 | 3 | 4 | 4 |
| *Xylopia aromatica* (Lam.) Mart. | Annonaceae | Tree |  | 1 | 1 |  | 4 | 1 | 1 |  | 2 |
| *Bauhinia* sp. | Fabaceae | Shrub | 3 | 5 | 4 | 1 | 2 | 1 | 1 | 1 | 2 |
| *Stryphnodendron* sp. | Fabaceae | Tree | 2 | 2 | 3 | 2 | 2 | 2 |  | 1 |  |
| *Ocotea pulchella* (Nees & Mart.) Mez | Lauraceae | Tree | 2 | 4 |  |  | 1 |  |  | 2 |  |
| *Banisteriopsis campestris* (A.Juss.) Little | Malpighiaceae | Shrub |  | 6 | 4 |  | 3 | 3 | 2 | 1 | 1 |
| *Byrsonima intermedia* A.Juss. | Malpighiaceae | Shrub |  |  |  |  | 3 | 7 | 2 |  |  |
| *Eugenia aurata* O.Berg | Myrtaceae | Tree |  |  |  | 1 | 1 |  |  |  |  |
| *Memora* sp. | Bignoniaceae | Shrub | 7 | 12 | 6 | 7 | 15 | 20 | 20 | 39 | 46 |
| *Myrcia lingua* (O.Berg) Mattos | Myrtaceae | Tree |  | 1 | 3 | 1 | 2 | 3 | 1 |  | 4 |
| *Myrcia* sp. | Myrtaceae | Shrub | 1 | 3 | 2 |  | 1 | 1 |  | 1 | 2 |
| *Pouteria torta* (Mart.) Radlk. | Sapotaceae | Tree | 2 | 6 | 5 |  | 13 | 25 | 28 | 21 | 26 |
| Sp. 1 | Not identified | Shrub |  |  | 1 |  |  |  |  |  |  |
| Sp. 2 |  | Shrub | 1 | 1 |  |  |  |  |  |  |  |
| Sp. 3 |  | Shrub |  |  | 1 |  |  |  |  |  |  |
| Sp. 4 |  | Shrub |  |  |  |  |  | 1 |  |  |  |
| Sp. 5 |  | Shrub |  |  |  |  | 1 |  |  |  |  |

**Supplementary Table S1**: Species list and number of woody individuals found in each treatment, considering the sum of all treatment’s plots (10 plots/treatments: control, removal of needles and fire) and time of experiment (before, four and 30 months after treatments application).



**Supplementary material Figure S1:** Percentage cover of A) palm trees ≤ 100 cm and B) forbs, subjected to the treatments C= Control; F= Fire; RN= Removal of Needles, before, four and 30 months after treatments application. Boxplots represent the median (black line), and the first and third quartiles (lower and upper lines, respectively). N.S. means that no significant difference among treatments and time was found (p ≤ 0.05).