**Table S4.** Concentrations of pollen types found in artificial traps in Trilha da Mata Lake, Carajás North Ridge, from May to August 2016.

|  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
|  | FO1 | FO2 | FO3 | FO4 | CV1 | CV2 | CV3 | CV4 | BJ1 | BJ2 | BJ3 |
| *Aparisthmium/Alchornea* | 21.50 | 16.21 | 6.98 | 26.61 | 47.79 | 17.73 | 69.12 | 4.26 | 32.19 | 4.20 | 33.82 |
| *Schefflera* | 157.70 | 12.16 | 5.58 | 1.69 | 1.49 | 0.00 | 0.00 | 0.33 | 2.73 | 0.00 | 77.79 |
| *Stryphynodendrom* | 0.00 | 220.91 | 9.07 | 4.65 | 1.49 | 0.39 | 0.00 | 0.33 | 0.00 | 0.00 | 0.00 |
| *Tapirira guianensis* | 0.00 | 10.13 | 4.88 | 3.80 | 2.99 | 4.33 | 6.40 | 0.00 | 3.82 | 8.41 | 7.89 |
| *Glycydendron* | 0.00 | 0.00 | 2.79 | 4.65 | 0.00 | 1.18 | 0.00 | 39.03 | 0.00 | 0.00 | 0.00 |
| *Anacardium* | 5.38 | 2.03 | 1.40 | 2.53 | 0.00 | 1.58 | 3.84 | 0.66 | 0.00 | 0.00 | 0.00 |
| *Cajanus* | 0.00 | 16.21 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| Sapindaceae | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.39 | 0.00 | 0.00 | 0.00 | 14.71 | 0.00 |
| *Astronium* | 0.00 | 0.00 | 4.19 | 0.00 | 0.00 | 0.00 | 10.24 | 0.00 | 0.00 | 0.00 | 0.00 |
| *Pleonotoma* | 0.00 | 4.05 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 7.89 |
| *Prestonia quinquangularis* | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 5.12 | 0.00 | 0.00 | 6.31 | 0.00 |
| *Ilex* | 0.00 | 0.00 | 0.00 | 0.42 | 0.00 | 0.00 | 8.96 | 0.00 | 1.09 | 0.00 | 0.00 |
| Bignoniaceae undif. | 0.00 | 10.13 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| Fabaceae | 0.00 | 0.00 | 0.00 | 0.00 | 2.99 | 0.39 | 0.00 | 0.00 | 0.00 | 6.31 | 0.00 |
| *Passiflora* | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 6.31 | 0.00 |
| *Fridericia* | 0.00 | 0.00 | 1.40 | 4.22 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| *Inga edulis* | 0.00 | 0.00 | 0.00 | 2.53 | 0.75 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| *Euphorbia* | 0.00 | 0.00 | 0.00 | 1.27 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| *Petiveria* | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 1.09 | 0.00 | 0.00 |
| *Inga* | 0.00 | 0.00 | 0.00 | 0.00 | 0.75 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| Euphorbiaceae | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.55 | 0.00 | 0.00 |
| *Tachigali vulgaris* | 0.00 | 0.00 | 0.00 | 0.42 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| *Miconia* undif. | 326.15 | 28.37 | 72.56 | 16.90 | 0.00 | 10.64 | 0.00 | 0.00 | 2.18 | 0.00 | 113.87 |
| *Cocoloba* | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 3.27 | 355.20 | 0.00 |
| Poaceae undif. | 12.54 | 8.11 | 12.56 | 4.22 | 146.35 | 27.98 | 17.92 | 40.02 | 10.37 | 14.71 | 14.66 |
| *Mimosa actistispula var. ferrea* | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 1.97 | 144.64 | 1.64 | 1.64 | 0.00 | 4.51 |
| *Protium pilosissimum* | 0.00 | 139.84 | 1.40 | 0.00 | 0.00 | 0.00 | 2.56 | 0.00 | 0.00 | 0.00 | 0.00 |
| *Palicourea* | 0.00 | 0.00 | 0.00 | 4.22 | 0.00 | 0.00 | 0.00 | 0.00 | 21.83 | 52.54 | 6.76 |
| *Smilax* | 0.00 | 8.11 | 13.26 | 0.00 | 14.93 | 7.49 | 0.00 | 0.00 | 10.37 | 27.32 | 0.00 |
| *Byrsonima* undif. | 0.00 | 2.03 | 3.49 | 0.84 | 0.00 | 1.18 | 10.24 | 1.97 | 15.82 | 0.00 | 34.95 |
| *Pleroma* | 19.71 | 6.08 | 0.00 | 0.00 | 0.00 | 0.00 | 6.40 | 2.30 | 0.00 | 0.00 | 0.00 |
| *Erythroxylum nelson-rosae* | 0.00 | 24.32 | 3.49 | 5.07 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| *Cassia* | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 31.53 | 0.00 |
| *Phytolacca thyrsiflora* | 5.38 | 10.13 | 2.09 | 0.42 | 0.00 | 0.00 | 0.00 | 2.30 | 3.27 | 0.00 | 7.89 |
| *Borreria* | 1.79 | 8.11 | 5.58 | 1.27 | 0.75 | 0.00 | 2.56 | 1.97 | 4.37 | 0.00 | 3.38 |
| *Periandra mediterranea* | 1.79 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 4.91 | 21.02 | 0.00 |
| *Curatella* | 1.79 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 3.84 | 0.00 | 0.00 | 18.92 | 0.00 |
| *Phyllantus hyssopifolioloides* | 0.00 | 0.00 | 0.00 | 1.69 | 2.24 | 0.00 | 0.00 | 0.00 | 0.00 | 16.81 | 0.00 |
| *Psychotria* | 0.00 | 0.00 | 0.00 | 0.84 | 0.00 | 0.00 | 0.00 | 0.00 | 1.64 | 14.71 | 0.00 |
| *Maprounea* | 0.00 | 6.08 | 0.00 | 0.00 | 10.45 | 0.39 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| Dilleniaceae | 0.00 | 14.19 | 0.00 | 0.00 | 0.00 | 1.58 | 0.00 | 0.00 | 0.55 | 0.00 | 0.00 |
| *Ouratea castenifolia* | 0.00 | 12.16 | 0.00 | 2.96 | 0.00 | 0.39 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| *Cuphea anagalloidea* | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 8.41 | 3.38 |
| *Mimosa* | 0.00 | 0.00 | 0.00 | 0.42 | 1.49 | 0.00 | 6.40 | 0.00 | 0.55 | 0.00 | 0.00 |
| *Pouteria ramiflora* | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 7.89 |
| *Chamaecrista flexuosa var. flexuosa* | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 6.40 | 0.00 | 0.00 | 0.00 | 0.00 |
| *Solanum crinitum* | 0.00 | 0.00 | 0.00 | 5.91 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| *Pilocarpus microphyllus* | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 5.12 | 0.00 | 0.00 | 0.00 | 0.00 |
| *Tetrapteris* | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 1.28 | 0.00 | 3.27 | 0.00 | 0.00 |
| *Cuphea* | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 2.30 | 0.00 | 0.00 | 2.25 |
| *Chamaecrista* | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 4.37 | 0.00 | 0.00 |
| *Aspilia attenuata* | 0.00 | 0.00 | 1.40 | 0.00 | 0.75 | 1.18 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| *Borreria tenella* | 0.00 | 0.00 | 2.09 | 0.42 | 0.00 | 0.79 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| Rubiaceae | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 1.31 | 1.09 | 0.00 | 0.00 |
| *Dioclea guianensis* | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 1.09 | 0.00 | 1.13 |
| *Alibertia* | 0.00 | 2.03 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| *Trichilia micrantha* | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 1.64 | 0.00 | 0.00 |
| *Hyptis parkeri* | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.39 | 0.00 | 0.66 | 0.55 | 0.00 | 0.00 |
| Asteraceae | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 1.28 | 0.00 | 0.00 | 0.00 | 0.00 |
| *Sauvagesia* | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 1.28 | 0.00 | 0.00 | 0.00 | 0.00 |
| *Sapium argutum* | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 1.28 | 0.00 | 0.00 | 0.00 | 0.00 |
| *Banisteriopsis* | 0.00 | 0.00 | 0.00 | 1.27 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| *Derris* | 0.00 | 0.00 | 0.70 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.55 | 0.00 | 0.00 |
| Myrtaceae | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 1.18 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| *Chromolaena maximilianii* | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 1.09 | 0.00 | 0.00 |
| Melastomataceae | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.98 | 0.00 | 0.00 | 0.00 |
| *Ouratea paraensis* | 0.00 | 0.00 | 0.00 | 0.84 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| *Camptosema ellipticum* | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.66 | 0.00 | 0.00 | 0.00 |
| *Lindernia crustacea* | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.55 | 0.00 | 0.00 |
| *Perama carajasenses* | 0.00 | 0.00 | 0.00 | 0.42 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| Onagraceae | 0.00 | 0.00 | 0.00 | 0.42 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| *Alternanthera* | 0.00 | 0.00 | 0.00 | 0.42 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| *Alternanthera* | 0.00 | 0.00 | 23.02 | 1.27 | 0.00 | 1.58 | 0.00 | 1.31 | 0.00 | 0.00 | 9.02 |
| *Euterpe* | 3.58 | 0.00 | 0.00 | 0.00 | 0.00 | 1.18 | 2.56 | 0.00 | 0.00 | 14.71 | 0.00 |
| *Elais* | 0.00 | 0.00 | 0.00 | 1.27 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| *Mauritiella armata* | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.39 | 6.40 | 0.00 | 0.00 | 0.00 | 2.25 |
| *Oenocarpus distichus* | 0.00 | 0.00 | 0.70 | 0.42 | 0.00 | 0.00 | 1.28 | 0.98 | 0.00 | 0.00 | 0.00 |
| Cyperaceae undif. | 0.00 | 0.00 | 1.40 | 0.42 | 11.95 | 0.00 | 1.28 | 1.97 | 1.64 | 0.00 | 1.13 |
| Eriocaulaceae undif. | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.79 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| *Polygonum acuminatum* | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 4.20 | 0.00 |
| *Polygala* | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 2.56 | 0.33 | 0.00 | 0.00 | 0.00 |
| *Christella* | 0.00 | 0.00 | 4.88 | 0.00 | 0.00 | 0.79 | 0.00 | 0.00 | 1.09 | 0.00 | 0.00 |
| *Cyathea* | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 3.84 | 0.00 | 0.00 | 0.00 | 0.00 |
| Cyatheaceae | 0.00 | 2.03 | 5.58 | 0.00 | 2.99 | 0.00 | 0.00 | 0.00 | 2.18 | 0.00 | 1.13 |
| Dryopteridaceae | 0.00 | 18.24 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| *Lycopodiella* | 0.00 | 2.03 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| *Microgramma* | 3.58 | 0.00 | 8.37 | 3.80 | 2.24 | 1.97 | 2.56 | 0.00 | 3.82 | 4.20 | 0.00 |
| *Pteridium arachnoideum* | 0.00 | 0.00 | 3.49 | 1.69 | 5.23 | 3.55 | 2.56 | 0.98 | 1.64 | 0.00 | 1.13 |
| *Pteris* | 0.00 | 4.05 | 0.00 | 1.27 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| *Pityrogramma calomelanos* | 1.79 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| Polypodiaceae | 0.00 | 0.00 | 0.00 | 0.42 | 0.75 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| *Polypodium* | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.55 | 0.00 | 0.00 |
| *Serpocaulon* | 0.00 | 8.11 | 4.19 | 3.38 | 2.99 | 0.00 | 0.00 | 0.33 | 0.00 | 0.00 | 6.76 |