**Supplementary Table 1**. List of species and number of seedlings which emerged from the soil seed bank of a temperate subhumid grassland of Uruguay, in response to five different fire-related treatments. C=control; S=smoke; H=heat shock; HS= heat shock and smoke; B=field-burn. All species were carefully revised, regarding taxonomic nomenclature, in online databases TROPICOS ([http://www.tropicos.org](https://www.google.com/url?q=http://www.tropicos.org&sa=D&ust=1565438948516000&usg=AFQjCNGPxrbbE_x06pM8LYvIZPONWIqa4g), last access: 18/04/2020) and Instituto de Botánica Darwinion (<http://www.darwin.edu.ar/Proyectos/FloraArgentina/Especies.asp>, last access, 18/04/2020).

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| **Species** | **Family** | **C** | **S** | **H** | **HS** | **B** |
| Dicots*Acanthostyles buniifolius* | Asteraceae | 0 | 0 | 0 | 0 | 3 |
| *Baccharis sp.* | Asteraceae | 3 | 9 | 2 | 3 | 5 |
| *Conyza bonariensis* | Asteraceae | 0 | 0 | 2 | 0 | 2 |
| *Erechtites hieraciifolius* | Asteraceae | 5 | 0 | 0 | 3 | 12 |
| *Gamochaeta americana* | Asteraceae | 10 | 27 | 19 | 19 | 20 |
| *Jaegeria hirta* | Asteraceae | 5 | 2 | 9 | 3 | 8 |
| *Mikania cordifolia* | Asteraceae | 1 | 1 | 0 | 1 | 1 |
| *Pluchea sagittalis* | Asteraceae | 0 | 3 | 1 | 1 | 1 |
| *Pterocaulon polystachyum* | Asteraceae | 0 | 0 | 1 | 0 | 0 |
| *Radlkoferotoma cistifolium* | Asteraceae | 2 | 4 | 0 | 1 | 0 |
| *Senecio brasiliensis* | Asteraceae | 0 | 0 | 3 | 0 | 3 |
| *Senecio pterophorus*  | Asteraceae | 0 | 0 | 0 | 0 | 1 |
| *Senecio selloi* | Asteraceae | 0 | 1 | 1 | 0 | 0 |
| *Stenachaenium megapotamicum* | Asteraceae | 7 | 2 | 6 | 2 | 12 |
| *Symphyotrichum squamatum* | Asteraceae | 0 | 0 | 0 | 0 | 1 |
| *Galium bigeminum* | Rubiaceae | 0 | 0 | 1 | 0 | 2 |
| *Galium hirtum* | Rubiaceae | 0 | 0 | 1 | 0 | 1 |
| *Galium noxium* | Rubiaceae | 0 | 1 | 0 | 0 | 0 |
| *Galium richardianum* | Rubiaceae | 0 | 0 | 0 | 0 | 2 |
| *Centella asiatica* | Apiaceae | 10 | 9 | 2 | 7 | 16 |
| *Cyclospermum leptophyllum* | Apiaceae | 3 | 11 | 6 | 4 | 15 |
| *Hydrocotyle sp.* | Apiaceae | 0 | 0 | 0 | 1 | 0 |
| *Oxalis lasiopetala* | Oxalidaceae | 1 | 0 | 0 | 0 | 0 |
| *Oxalis sp.* | Oxalidaceae | 0 | 1 | 2 | 1 | 0 |
| *Gratiola peruviana* | Plantaginaceae | 1 | 8 | 0 | 5 | 6 |
| *Plantago myosuros* | Plantaginaceae | 1 | 2 | 0 | 1 | 2 |
| *Trifolium sp.* | Fabaceae | 0 | 1 | 0 | 0 | 0 |
| *Hypericum campestre* | Hypericaceae | 1 | 0 | 0 | 0 | 1 |
| *Centunculus minimus* | Primulaceae | 1 | 0 | 0 | 3 | 1 |
| *Mecardonia procumbens* | Scrophulariaceae | 1 | 0 | 0 | 0 | 1 |
| *Turnera sidoides* | Turneraceae | 0 | 0 | 0 | 0 | 1 |
| Monocots |  |  |  |  |  |  |
| *Aristida sp.* | Poaceae | 0 | 1 | 0 | 0 | 0 |
| *Axonopus fissifolius* | Poaceae | 0 | 1 | 0 | 1 | 1 |
| *Cinnagrostis sp.* | Poaceae | 0 | 0 | 1 | 0 | 2 |
| *Chascolytrum sp.* | Poaceae | 0 | 0 | 0 | 0 | 2 |
| *Dichanthelium sabulorum* | Poaceae | 1 | 1 | 5 | 5 | 4 |
| *Eragrostis purpurascens* | Poaceae | 0 | 0 | 0 | 7 | 0 |
| *Nassella neesiana* | Poaceae | 2 | 0 | 0 | 0 | 0 |
| *Paspalum plicatulum* | Poaceae | 0 | 0 | 0 | 1 | 5 |
| *Paspalum urvillei* | Poaceae | 0 | 0 | 0 | 0 | 1 |
| *Saccharum angustifolium* | Poaceae | 0 | 0 | 0 | 0 | 2 |
| *Steinchisma hians* | Poaceae | 1 | 0 | 0 | 0 | 3 |
| *Setaria parviflora* | Poaceae | 0 | 0 | 0 | 0 | 1 |
| *Androtrichum giganteum* | Cyperaceae | 1 | 0 | 0 | 0 | 0 |
| *Carex phalaroides* | Cyperaceae | 1 | 2 | 1 | 0 | 0 |
| *Cyperus lanceolatus* | Cyperaceae | 0 | 0 | 0 | 0 | 2 |
| *Eleocharis sp.* | Cyperaceae | 0 | 0 | 0 | 0 | 1 |
| *Eleocharis viridans* | Cyperaceae | 1 | 0 | 0 | 0 | 0 |
| *Fimbristylis complanata* | Cyperaceae | 5 | 5 | 5 | 4 | 3 |
| *Herbertia lahue*  | Iridaceae | 0 | 0 | 0 | 0 | 1 |
| *Sisyrinchium sp.* | Iridaceae | 1 | 0 | 1 | 1 | 1 |
| *Juncus capillaceus* | Juncaceae | 5 | 9 | 9 | 4 | 9 |
| *Juncus pallescens* | Juncaceae | 3 | 4 | 3 | 1 | 2 |
| *Hypoxis decumbens* | Hypoxidaceae  | 3 | 14 | 2 | 3 | 8 |