

Table S7. Percentages of sequences with *rps19* insertions in different families.

| Family | No. of sequences | No. of sequences with <i>rps19</i> | Percentage of sequences with <i>rps19</i> insertions (%) |
|------------------|-------------------------|---|---|
| Poaceae | 494 | 494 | 100.0 |
| Orchidaceae | 488 | 488 | 100.0 |
| Asparagaceae | 142 | 142 | 100.0 |
| Hypoxidaceae | 123 | 123 | 100.0 |
| Bromeliaceae | 94 | 94 | 100.0 |
| Arecaceae | 66 | 66 | 100.0 |
| Hyacinthaceae | 59 | 59 | 100.0 |
| Amaryllidaceae | 36 | 36 | 100.0 |
| Xanthorrhoeaceae | 29 | 29 | 100.0 |
| Commelinaceae | 7 | 7 | 100.0 |
| Typhaceae | 6 | 6 | 100.0 |
| Eriocaulaceae | 6 | 6 | 100.0 |
| Juncaceae | 5 | 5 | 100.0 |
| Stemonaceae | 5 | 5 | 100.0 |
| Zingiberaceae | 297 | 294 | 99.0 |
| Iridaceae | 128 | 120 | 93.8 |
| Zygophyllaceae | 122 | 109 | 89.3 |
| Cyperaceae | 66 | 53 | 80.3 |
| Musaceae | 72 | 54 | 75.0 |
| Acoraceae | 44 | 33 | 75.0 |
| Smilacaceae | 10 | 7 | 70.0 |
| Melanthiaceae | 132 | 87 | 65.9 |
| Pandanaceae | 5 | 3 | 60.0 |
| Fagaceae | 173 | 90 | 52.0 |
| Liliaceae | 258 | 76 | 29.5 |
| Dioscoreaceae | 197 | 56 | 28.4 |
| Aquifoliaceae | 44 | 10 | 22.7 |
| Colchicaceae | 61 | 12 | 19.7 |
| Melastomataceae | 15 | 1 | 6.7 |
| Polygonaceae | 148 | 7 | 4.7 |
| Acanthaceae | 24 | 1 | 4.2 |
| Apiaceae | 103 | 4 | 3.9 |
| Grossulariaceae | 32 | 1 | 3.1 |
| Amaranthaceae | 77 | 1 | 1.3 |
| Araceae | 97 | 1 | 1.0 |
| Rosaceae | 580 | 5 | 0.9 |
| Rubiaceae | 199 | 1 | 0.5 |
| Lamiaceae | 429 | 2 | 0.5 |
| Asteraceae | 1654 | 7 | 0.4 |
| Fabaceae | 515 | 1 | 0.2 |
| Solanaceae | 746 | 1 | 0.1 |
| Polytrichaceae | 12 | 0 | 0.0 |
| Dicranaceae | 64 | 0 | 0.0 |
| Mniaceae | 9 | 0 | 0.0 |
| Polypodiaceae | 9 | 0 | 0.0 |
| Pinaceae | 359 | 0 | 0.0 |
| Podocarpaceae | 13 | 0 | 0.0 |
| Cupressaceae | 73 | 0 | 0.0 |
| Ephedraceae | 15 | 0 | 0.0 |
| Ranunculaceae | 363 | 0 | 0.0 |
| Papaveraceae | 5 | 0 | 0.0 |
| Moraceae | 502 | 0 | 0.0 |

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|------------------|-----|---|-----|
| Betulaceae | 205 | 0 | 0.0 |
| Caryophyllaceae | 247 | 0 | 0.0 |
| Cactaceae | 117 | 0 | 0.0 |
| Vitaceae | 423 | 0 | 0.0 |
| Rhamnaceae | 7 | 0 | 0.0 |
| Malvaceae | 232 | 0 | 0.0 |
| Cucurbitaceae | 475 | 0 | 0.0 |
| Begoniaceae | 144 | 0 | 0.0 |
| Passifloraceae | 41 | 0 | 0.0 |
| Salicaceae | 59 | 0 | 0.0 |
| Brassicaceae | 84 | 0 | 0.0 |
| Sapotaceae | 45 | 0 | 0.0 |
| Crassulaceae | 32 | 0 | 0.0 |
| Saxifragaceae | 102 | 0 | 0.0 |
| Myrtaceae | 34 | 0 | 0.0 |
| Onagraceae | 11 | 0 | 0.0 |
| Combretaceae | 16 | 0 | 0.0 |
| Santalaceae | 8 | 0 | 0.0 |
| Loranthaceae | 37 | 0 | 0.0 |
| Euphorbiaceae | 13 | 0 | 0.0 |
| Linaceae | 15 | 0 | 0.0 |
| Anacardiaceae | 9 | 0 | 0.0 |
| Burseraceae | 375 | 0 | 0.0 |
| Geraniaceae | 10 | 0 | 0.0 |
| Oxalidaceae | 31 | 0 | 0.0 |
| Araliaceae | 124 | 0 | 0.0 |
| Apocynaceae | 51 | 0 | 0.0 |
| Convolvulaceae | 69 | 0 | 0.0 |
| Oleaceae | 308 | 0 | 0.0 |
| Caprifoliaceae | 73 | 0 | 0.0 |
| Adoxaceae | 99 | 0 | 0.0 |
| Celastraceae | 232 | 0 | 0.0 |
| Proteaceae | 6 | 0 | 0.0 |
| Primulaceae | 361 | 0 | 0.0 |
| Ericaceae | 785 | 0 | 0.0 |
| Campanulaceae | 40 | 0 | 0.0 |
| Platanaceae | 16 | 0 | 0.0 |
| Plumbaginaceae | 57 | 0 | 0.0 |
| Alismataceae | 51 | 0 | 0.0 |
| Heliconiaceae | 4 | 0 | 0.0 |
| Sphagnaceae | 4 | 0 | 0.0 |
| Pteridaceae | 70 | 0 | 0.0 |
| Potamogetonaceae | 25 | 0 | 0.0 |
| Juglandaceae | 11 | 0 | 0.0 |
| Ebenaceae | 7 | 0 | 0.0 |
| Styracaceae | 5 | 0 | 0.0 |
| Symplocaceae | 204 | 0 | 0.0 |
| Gentianaceae | 56 | 0 | 0.0 |
| Boraginaceae | 48 | 0 | 0.0 |
| Verbenaceae | 4 | 0 | 0.0 |
| Chrysobalanaceae | 14 | 0 | 0.0 |
| Hydrangeaceae | 36 | 0 | 0.0 |
| Rutaceae | 47 | 0 | 0.0 |
| Violaceae | 14 | 0 | 0.0 |
| Paeoniaceae | 36 | 0 | 0.0 |
| Taxaceae | 68 | 0 | 0.0 |

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|------------------|-----|---|-----|
| Araucariaceae | 46 | 0 | 0.0 |
| Balsaminaceae | 4 | 0 | 0.0 |
| Cymodoceaceae | 13 | 0 | 0.0 |
| Elaeagnaceae | 10 | 0 | 0.0 |
| Elaeocarpaceae | 4 | 0 | 0.0 |
| Gesneriaceae | 45 | 0 | 0.0 |
| Hydrocharitaceae | 26 | 0 | 0.0 |
| Loganiaceae | 13 | 0 | 0.0 |
| Nothofagaceae | 47 | 0 | 0.0 |
| Theaceae | 65 | 0 | 0.0 |
| Zosteraceae | 8 | 0 | 0.0 |
| Dryopteridaceae | 64 | 0 | 0.0 |
| Hymenophyllaceae | 34 | 0 | 0.0 |
| Lindsaeaceae | 56 | 0 | 0.0 |
| Lomariopsidaceae | 4 | 0 | 0.0 |
| Brachytheciaceae | 12 | 0 | 0.0 |
| Loasaceae | 88 | 0 | 0.0 |
| Thymelaeaceae | 56 | 0 | 0.0 |
| Berberidaceae | 83 | 0 | 0.0 |
| Aspleniaceae | 18 | 0 | 0.0 |
| Hamamelidaceae | 61 | 0 | 0.0 |
| Cornaceae | 46 | 0 | 0.0 |
| Meliaceae | 32 | 0 | 0.0 |
| Cephalotaxaceae | 59 | 0 | 0.0 |
| Orthotrichaceae | 41 | 0 | 0.0 |
| Hypnaceae | 9 | 0 | 0.0 |
| Tamaricaceae | 56 | 0 | 0.0 |
| Grimmiaceae | 116 | 0 | 0.0 |
| Caryocaraceae | 104 | 0 | 0.0 |
| Meliantaceae | 10 | 0 | 0.0 |
| Stachyuraceae | 10 | 0 | 0.0 |
| Altingiaceae | 33 | 0 | 0.0 |
| Nitrariaceae | 23 | 0 | 0.0 |
| Orobanchaceae | 508 | 0 | 0.0 |
| Ptychomniaceae | 10 | 0 | 0.0 |
| Plantaginaceae | 720 | 0 | 0.0 |
| Phyllanthaceae | 53 | 0 | 0.0 |
| Woodsiaceae | 20 | 0 | 0.0 |
| Hypericaceae | 5 | 0 | 0.0 |
| Lygodiaceae | 17 | 0 | 0.0 |
| Aceraceae | 445 | 0 | 0.0 |