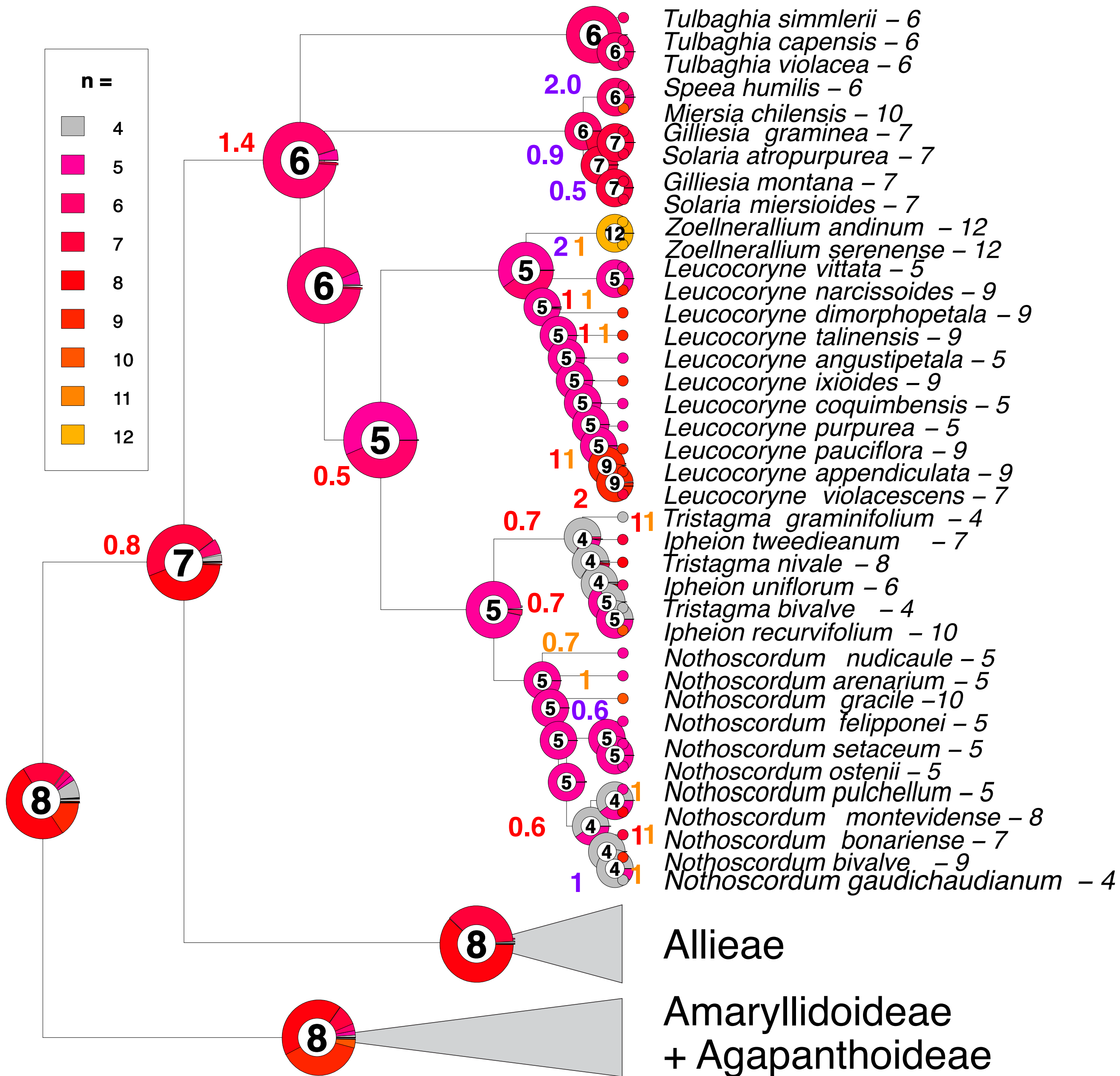




Events inferred with an exp. > 0.5: 262.6

Chromosome gains : 93

Chromosome losses : 83.1

Duplications : 86.5

Demiduplications : 0



Gilliesieae
+ Tulbaghieae

Allium I

Allium II

Allium III

n =

6	7	8	9	10	11	12	13	14	15	16	18	19	21	22	23	24
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Events inferred with an exp. > 0.5: 262.6

Chromosome gains : 93
Chromosome losses : 83.1
Duplications : 86.5
Demiduplications : 0

- Allium stellatum – 7
- Allium inutile – 8
- Allium drummondii – 7
- Allium canadense – 14
- Allium geyeri – 7
- Allium validum – 28
- Allium textile – 7
- Allium fasciculatum – 10
- Allium uniflorum – 7
- Allium hookeri – 11
- Allium macranthum – 14
- Allium wallichii – 8
- Allium narcissiflorum – 7
- Allium insubricum – 7
- Allium moly – 7
- Allium scorzonnerifolium – 7
- Allium paradoxum – 7
- Allium triquetrum – 9
- Allium pendulinum – 8
- Allium subvillosum – 7
- Allium subhirsutum – 7
- Allium chamaemoly – 8
- Allium zebdanense – 9
- Allium victoralis – 8
- Allium ovalifolium – 8
- Allium prattii – 16
- Allium oreophilum – 8
- Allium fetisowii – 8
- Allium decipiens – 8
- Allium tulipifolium – 8
- Allium robustum – 8
- Allium chelotum – 11
- Allium sarawtschanicum – 8
- Allium aroides – 8
- Allium protensum – 8
- Allium caspium – 8
- Allium nevskianum – 8
- Allium bucharicum – 8
- Allium gypsaceum – 8
- Allium alexeianum – 8
- Allium ochotense – 8
- Allium giganteum – 8
- Allium atropurpureum – 8
- Allium hissaricum – 8
- Allium winklerianum – 8
- Allium costatovaginatatum – 8
- Allium saposhnikovii – 8
- Allium tashkentium – 8
- Allium sewerzowii – 8
- Allium trautvetterianum – 8
- Allium altissimum – 8
- Allium stipitatum – 8
- Allium komarowii – 8
- Allium lipskianum – 8
- Allium maclearii – 8
- Allium rosenorum – 8
- Allium affatunense – 8
- Allium bakhtiaricum – 8
- Allium vvedenskyanum – 8
- Allium motor – 8
- Allium cardiostemon – 8
- Allium christophii – 8
- Allium suworowii – 8
- Allium verticillatum – 8
- Allium chitralicum – 16
- Allium karataviense – 9
- Allium dodecadontum – 8
- Allium nigrum – 8
- Allium orientale – 8
- Allium cyrilli – 16
- Allium schubertii – 8
- Allium darwasicum – 8
- Allium regelii – 8
- Allium akaka – 8
- Allium derderianum – 8
- Allium breviscapum – 8
- Allium shelkovnikovii – 8
- Allium materculae – 8
- Allium przewalskianum – 16
- Allium mongolicum – 8
- Allium sativum – 8
- Allium sphaerocephalon – 8
- Allium ampeloprasum – 16
- Allium tuberosum – 16
- Allium leucanthum – 8
- Allium filidens – 8
- Allium cernuum – 7
- Allium oreoprasum – 8
- Allium forrestii – 8
- Allium pyrenacium – 16
- Allium tuncelianum – 8
- Allium commutatum – 8
- Allium acutiflorum – 8
- Allium tricoccum – 8
- Allium ursinum – 7
- Allium scorodoprasum – 8
- Allium chamaespasum – 16
- Allium carinatum – 12
- Allium vineale – 16
- Allium tianschanicum – 8
- Allium carolinianum – 16
- Allium griffithianum – 8
- Allium saxatile – 8
- Allium gunibicum – 8
- Allium altaicum – 8
- Allium obliquum – 8
- Allium fistulosum – 8
- Allium roylei – 8
- Allium galanthum – 8
- Allium cyaneum – 16
- Allium cepa – 8
- Allium ledebourianum – 8
- Allium pskemense – 8
- Allium ochroleucum – 16
- Allium altynolicum – 16
- Allium oliganthum – 8
- Allium subtilissimum – 8
- Allium schoenoprasum – 8
- Allium wakegi – 8
- Allium macrostemon – 16
- Allium kurssanovii – 8
- Allium caesium – 16
- Allium caeruleum – 8
- Allium sabylosum – 16
- Allium cyathophorum – 8
- Allium thunbergii – 8
- Allium mairei – 8
- Allium angulosum – 8
- Allium senescens – 16
- Allium tuvinicum – 16
- Allium nutans – 16
- Allium chrysocephalum – 8
- Allium ramosum – 16
- Allium platyspathum – 8
- Allium heldreichii – 8
- Allium neriniflorum – 8
- Allium margaritae – 8
- Allium sikkimense – 18
- Allium obtusiflorum – 8
- Allium pallasi – 8
- Allium kunthianum – 8
- Allium rupestre – 12
- Allium sacculiferum – 8
- Allium chinense – 10
- Allium lineare – 8
- Allium strictum – 16
- Allium flavidum – 8
- Allium montibaicalense – 8
- Allium clathratum – 12
- Allium leucocephalum – 8
- Allium splendens – 6
- Agapanthus campanulatus – 15

Amaryllidoideae
+ Agapanthoideae

Agapanthoideae

Agapanthus

Crinum

Cyrtanthus

Clivia

Haemanthus

Hippeastrum

Zephyranthes

Lycoris

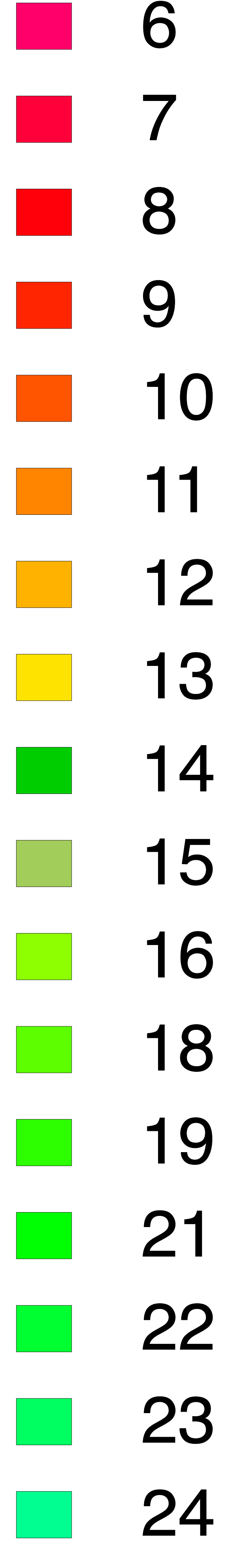
Galanthus

Narcissus

Allioideae

- Agapanthus campanulatus - 15
- Agapanthus praecox - 16
- Agapanthus africanus - 15
- Agapanthus gaulscensis - 15
- Boophone disticha - 11
- Nerine bowdenii - 11
- Nerine undulata - 11
- Brunsvigia orientalis - 11
- Brunsvigia radiculosa - 11
- Brunsvigia bosmaniae - 11
- Hessea stellaris - 11
- Brunsvigia brevipedata - 11
- Hessea stenosphon - 11
- Strumaria discifera - 10
- Strumaria watermeyerii - 10
- Strumaria aestivalis - 10
- Strumaria chaplinii - 10
- Crossyne guttata - 11
- Strumaria truncata - 10
- Strumaria bidentata - 10
- Nerine masonorum - 11
- Strumaria tenella - 10
- Hessea pilosula - 11
- Hessea speciosa - 11
- Strumaria picta - 10
- Nerine laticoma - 11
- Nerine huttoniae - 11
- Crinum latifolium - 11
- Crinum jagus - 11
- Ammodon longifolia - 11
- Crinum album - 11
- Crinum polifolium - 15
- Crinum campanulatum - 11
- Crinum moorei - 11
- Crinum americanum - 11
- Crinum lugardii - 11
- Crinum acaule - 11
- Crinum humile - 11
- Crinum distichum - 10
- Crinum natans - 11
- Crinum macowanii - 11
- Crinum variabile - 11
- Ammodon tinneana - 11
- Nerine humilis - 11
- Nerine platyphala - 11
- Crinum asiaticum - 11
- Crinum tinnitolum - 11
- Crinum buphanoides - 11
- Crinum graminicola - 11
- Crinum timbratum - 11
- Ammodon granitica - 11
- Cyrtanthus longifolia - 11
- Crinum purpurascens - 11
- Crinum paspaloides - 11
- Crinum ornatum - 12
- Crinum rautanenianum - 11
- Crinum stuhlmannii - 11
- Crinum glaucum - 11
- Crinum flaccidum - 11
- Crinum erubescens - 11
- Crinum bulbospermum - 12
- Cyrtanthus kirkii - 11
- Cyrtanthus montanus - 8
- Cyrtanthus obliquus - 8
- Cyrtanthus carneus - 8
- Cyrtanthus faicatus - 8
- Cyrtanthus flanaganii - 8
- Cyrtanthus mackenzii - 8
- Cyrtanthus herrei - 8
- Cyrtanthus calipinii - 8
- Cyrtanthus contractus - 8
- Cyrtanthus sanguineus - 8
- Cyrtanthus eucallus - 8
- Cyrtanthus smithiae - 8
- Cyrtanthus helictus - 8
- Cyrtanthus lodgesianus - 8
- Cyrtanthus elatus - 8
- Cyrtanthus stenanthus - 8
- Cyrtanthus breviflorus - 8
- Cyrtanthus tuckii - 8
- Cyrtanthus epiphyticus - 8
- Cyrtanthus angustifolius - 8
- Cyrtanthus macowanii - 8
- Cyrtanthus parviflorus - 8
- Cyrtanthus huttonii - 8
- Cyrtanthus brachystochus - 8
- Cryptosepban usvansonii - 12
- Clivia robusta - 11
- Clivia miniata - 11
- Clivia nobilis - 11
- Clivia mirabilis - 11
- Clivia carolinii - 11
- Clivia caulescens - 11
- Scadoxus puniceus - 9
- Scadoxus multiflorus - 9
- Gethyllis namaquensis - 9
- Gethyllis britteniana - 9
- Gethyllis ciliaris - 8
- Haemanthus albillos - 8
- Haemanthus humilis - 8
- Haemanthus montanus - 8
- Haemanthus graniticus - 8
- Haemanthus amarylloides - 8
- Haemanthus pumilio - 8
- Haemanthus crispus - 8
- Haemanthus sanguineus - 8
- Haemanthus coccineus - 8
- Vorsleya procera - 21
- Eucharis amazonica - 68
- Phaedranassa dubia - 23
- Cyrtanthus variegatus - 23
- Flagellon horsmannii - 23
- Bauhinia uniflora - 23
- Paratongaia webbaueri - 23
- Pamianthe peruviana - 23
- Ismene variabilis - 23
- Hymenocallis glauca - 43
- Hymenocallis rotata - 22
- Hymenocallis speciosa - 27
- Ismene longipetala - 23
- Hymenocallis littoralis - 23
- Hymenocallis latifolia - 24
- Leptochiton quitensis - 12
- Ismene amarae - 23
- Hymenocallis acutifolia - 23
- Ismene narcissiflora - 23
- Placca germarii - 52
- Placca germanii - 8
- Phycella australis - 8
- Placca arzae - 8
- Placca ornata - 8
- Placca lutea - 8
- Hippeastrum vittatum - 22
- Hippeastrum psittacinum - 11
- Hippeastrum moreletianum - 11
- Hippeastrum evansiae - 11
- Hippeastrum papilio - 11
- Hippeastrum traubii - 11
- Hippeastrum striatum - 11
- Rhodophiala montana - 9
- Rhodophiala splendens - 9
- Rhodophiala littlensis - 9
- Rhodophiala araucana - 27
- Lraubia modesta - 8
- Rhodophiala bagnoldii - 9
- Rhodophiala adyana - 9
- Rhodophiala chilensis - 9
- Habranthus tubispathus - 12
- Habranthus martinezii - 6
- Sprekelia formosissima - 61
- Zithea blumenavia - 10
- Zephyranthes andleyana - 48
- Zephyranthes mesochloa - 13
- Zephyranthes drummondii - 24
- Zephyranthes stammasco - 6
- Zephyranthes treatiae - 12
- Zephyranthes simpsonii - 24
- Zephyranthes rosea - 12
- Zephyranthes macropsippon - 24
- Zephyranthes smallii - 35
- Zephyranthes albiella - 19
- Zephyranthes puertoricensis - 13
- Zephyranthes candida - 19
- Zephyranthes citrina - 24
- Zephyranthes minima - 10
- Myostema elwesii - 18
- Lycoris aurea - 7
- Lycoris longituba - 8
- Lycoris rosea - 1
- Lycoris squamigera - 13
- Lycoris chinensis - 8
- Lycoris albiflora - 9
- Lycoris sprengeri - 11
- Lycoris coreana - 11
- Lycoris haywardii - 11
- Lycoris radiata - 11
- Laqania olivieri - 11
- Lapiedra martinezii - 11
- Hannonia hesperidum - 7
- Eucrosia dodsonii - 23
- Acis autumnalis - 7
- Acis trichophylla - 7
- Acis nicaeensis - 9
- Acis virens - 7
- Acis rosea - 8
- Leucorum aestivum - 11
- Leucorum vernum - 10
- Galanthus krasovii - 12
- Galanthus platyphyllus - 12
- Galanthus trojanus - 12
- Galanthus karrae - 12
- Galanthus beshmenii - 12
- Galanthus gracilis - 12
- Galanthus elwesii - 12
- Galanthus cilicicus - 12
- Galanthus agodochianus - 36
- Galanthus plicatus - 12
- Galanthus reginaeolgae - 12
- Galanthus nivalis - 12
- Galanthus kosenerianus - 12
- Galanthus angustifolius - 12
- Galanthus transcaucasicus - 12
- Galanthus woronowii - 12
- Galanthus tostenii - 12
- Pancratium canariense - 13
- Pancratium trianthum - 11
- Pancratium maritimum - 11
- Pancratium tenuifolium - 11
- Pancratium zeylanicum - 11
- Sternbergia colchiciflora - 10
- Sternbergia clausiana - 10
- Sternbergia candida - 10
- Sternbergia vernalis - 11
- Sternbergia pulchella - 10
- Narcissus papyraceus - 11
- Narcissus serotinus - 15
- Narcissus obsoletus - 15
- Narcissus broussonetii - 11
- Narcissus tazetta - 11
- Narcissus glutinosus - 10
- Narcissus glaucus - 10
- Narcissus atlanticus - 7
- Narcissus rupicola - 7
- Narcissus cavanillesii - 14
- Narcissus calceola - 7
- Narcissus scaberulus - 7
- Narcissus viridiflorus - 14
- Narcissus dubius - 25
- Narcissus obsus - 13
- Narcissus nivalis - 13
- Narcissus cuatrecasagii - 7
- Narcissus cernuus - 7
- Narcissus cantabricus - 7
- Narcissus bulbocodium - 13
- Narcissus assoanus - 7
- Narcissus nevadensis - 7
- Narcissus cyclamineus - 7
- Narcissus jactatus - 7
- Narcissus molerii - 15
- Narcissus jonquilla - 7
- Narcissus lusitanicus - 7
- Narcissus triandrus - 7
- Narcissus hispanicus - 7
- Narcissus romieuxii - 14
- Narcissus abscissus - 14
- Narcissus hesperianus - 7
- Narcissus cyclamineus - 7
- Narcissus jactatus - 7
- Narcissus asiaticus - 7
- Narcissus griseobasus - 7
- Narcissus pseudonarcissus - 7

n =



Events inferred with an exp. > 0.5: 262.6

Chromosome gains : 93
Chromosome losses : 83.1
Duplications : 86.5
Demiduplications : 0