

**Supplementary material to “Molecular evolution and diversification of phytoene synthase (PSY) gene family”****Table S1** - Detailed data of retrieved sequences and species used in this study.

| Species                                   | Acronym    | Score | Evalue    | Transcript Name   | CDS Accession Number | Location  | Classification group | Order                           | Query                             |
|---|------------|-------|-----------|-------------------|----------------------|---|----------------------|---------------------------------|-----------------------------------|
| <i>Anaeromyxobacter sp</i>                | <i>Asp</i> | 165   | 2,70E-39  | <i>ABS28258</i>   | <i>ABS28258</i>      | Chromosome: 4,772,703-4,773,635 reverse strand              | Prokariotae          | Myxococcales                    | <i>Solyc03g031860.2.1</i>         |
| <i>Candidatus Parcubacteria bacterium</i> | <i>Cpb</i> | 356   | 3,00E-118 | <i>MBC7822343</i> | <i>MBC7822343.1</i>  |   | Prokariotae          | <i>Candidatus parcubacteria</i> | <i>Solyc03g031860.2.1</i>         |
| <i>Cronobacter turicensis</i>             | <i>Ctu</i> | 333   | 2,00E-86  | <i>FN543093</i>   | <i>FN543093.2</i>    |   | Prokariotae          | Enterobacteriales               | <i>Pantoeae ananatis D90087.2</i> |
| <i>Cronobacter universalis</i>            | <i>Cun</i> | 333   | 2,00E-86  | <i>CP012257</i>   | <i>CP012257.1</i>    |   | Prokariotae          | Enterobacteriales               | <i>Pantoeae ananatis D90087.2</i> |
| <i>Erwinia gerundensis</i>                | <i>Ege</i> | 129   | 6,90E-32  | <i>CUU22454</i>   | <i>CUU22454</i>      | Chromosome 1: 233,386-234,312 reverse strand.               | Prokariotae          | Enterobacteriales               | <i>Solyc03g031860.2.1</i>         |
| <i>Erwinia sp.</i>                        | <i>Esp</i> | 162   | 6,70E-33  | <i>RRZ89314</i>   | <i>RRZ89314</i>      | <i>NODE_11_length_177429_cov_45.8436_17769 to 18209 (-)</i> | Prokariotae          | Enterobacteriales               | <i>Solyc03g031860.2.1</i>         |
| <i>Mixta calida</i>                       | <i>Mca</i> | 345   | 3,00E-90  | <i>CP061511</i>   | <i>CP061511.1</i>    |   | Prokariotae          | Enterobacteriales               | <i>Pantoeae ananatis D90087.2</i> |
| <i>Mixta gaviniae</i>                     | <i>Mga</i> | 353   | 2,00E-92  | <i>CP026377</i>   | <i>CP026377.1</i>    |   | Prokariotae          | Enterobacteriales               | <i>Pantoeae ananatis D90087.2</i> |

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|-------------------------------------|---------|-------|-----------|-----------------|----------------------|--|----------------------|-------------------|----------------------------|
| <i>Myxococcus fulvus</i>            | Mfu     | 199   | 3,30E-31  | SET01046        | SET01046             | SuperContig Ga0131203_101: 961,439-962,455 forward strand. | Prokariotae          | Mixococcales      | Solyc03g031860.2.1         |
| <i>Myxococcus hansupus</i>          | Mha     | 205   | 9,60E-50  | AKQ69173        | AKQ69173             | Chromosome: 7,548,393-7,549,391 reverse strand.            | Prokariotae          | Mixococcales      | Solyc03g031860.2.1         |
| <i>Myxococcus macrosporus</i>       | Mma     | 206   | 1,50E-50  | ATB45335        | ATB45335             | Chromosome: 1,082,269-1,083,282 forward strand.            | Prokariotae          | Mixococcales      | Solyc03g031860.2.1         |
| <i>Myxococcus stipitatus</i>        | Msi     | 204   | 2,50E-50  | AGC42255        | AGC42255             | Chromosome: 1,121,269-1,122,288 forward strand.            | Prokariotae          | Mixococcales      | Solyc03g031860.2.1         |
| <i>Myxococcus virescens</i>         | Mvi     | 201   | 3,90E-50  | SDD40313        | SDD40313             | SuperContig Ga0070493_101: 905,667-906,677 reverse strand. | Prokariotae          | Mixococcales      | Solyc03g031860.2.1         |
| <i>Myxococcus xanthus</i>           | Mxa     | 202   | 5,10E-52  | ABF86184        | ABF86184             | Chromosome: 1,021,919-1,022,929 forward strand             | Prokariotae          | Mixococcales      | Solyc03g031860.2.1         |
| <i>Pantoea agglomerans</i>          | Pag     | 669   | 0.0       | CP031650        | CP031650.1           |  | Prokariotae          | Enterobacteriales | Pantoeae ananatis D90087.2 |
| <i>Pantoea ananatis</i>             | Pan     | 1678  | 0.0       | D90087          | D90087.2             |  | Prokariotae          | Enterobacteriales | Pantoeae ananatis D90087.2 |
| <i>Pantoea ananatis</i>             | Pan     | 1645  | 0.0       | CP001875        | CP001875.2           |  | Prokariotae          | Enterobacteriales | Pantoeae ananatis D90087.2 |
| <i>Pantoea eucalypti</i>            | Peu     | 625   | 2,00E-174 | CP045721        | CP045721.1           |  | Prokariotae          | Enterobacteriales | Pantoeae ananatis D90087.2 |
| <i>Pantoea stewartii</i>            | Pst     | 883   | 0.0       | CP017591        | CP017591.1           |  | Prokariotae          | Enterobacteriales | Pantoeae ananatis D90087.2 |
| <i>Pantoea vagans</i>               | Pva     | 662   | 0.0       | KT156635        | KT156635.1           |  | Prokariotae          | Enterobacteriales | Pantoeae ananatis D90087.2 |
| <i>Ahnfeltiopsis flabelliformis</i> | Afl     | 312   | 2,00E-102 | ATQ35976        | ATQ35976             |  | Rhodophyta           | Gigartinales      | Solyc03g031860.2.1         |
| <i>Betaphycus gelatinus</i>         | Bge     | 300   | 3,00E-98  | ATQ35975        | ATQ35975             |  | Rhodophyta           | Gigartinales      | Solyc03g031860.2.1         |

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|------------------------------------|---------|-------|-----------|-----------------|----------------------|--|----------------------|----------------|--------------------|
| <i>Chondrus crispus</i>            | Cci     | 291   | 1,00E-95  | ATQ35984        | ATQ35984             |  | Rhodophyta           | Gigartinales   | Solyc03g031860.2.1 |
| <i>Cyanidioschyzon merolae</i>     | Cme     | 317   | 4,00E-103 | XP_005537057    | XP_005537057         |  | Rhodophyta           | Cyanidiales    | Solyc03g031860.2.1 |
| <i>Dumontia simplex</i>            | Dsi     | 306   | 3,00E-100 | ATQ35978        | ATQ35978             |  | Rhodophyta           | Gigartinales   | Solyc03g031860.2.1 |
| <i>Galdieria sulphuraria</i>       | Gsu     | 498   | 1,70E-91  | EME29253        | EME29253             | SuperContig scaf_26:<br>15,896-17,400 reverse strand | Rhodophyta           | Cyanidiales    | Solyc03g031860.2.1 |
| <i>Gracilaria chouae</i>           | Gco     | 295   | 1,00E-95  | ATQ35977        | ATQ35977             |  | Rhodophyta           | Gracilariales  | Solyc03g031860.2.1 |
| <i>Gracilariopsis chorda</i>       | Gch     | 305   | 5,00E-100 | PXF46860        | PXF46860             |  | Rhodophyta           | Gracilariales  | Solyc03g031860.2.1 |
| <i>Gracilariopsis lemneiformis</i> | Gle     | 305   | 1,00E-99  | ATQ35980        | ATQ35980             |  | Rhodophyta           | Gracilariales  | Solyc03g031860.2.1 |
| <i>Grateloupia catenata</i>        | Gca     | 293   | 5,00E-95  | ATQ35982        | ATQ35982             |  | Rhodophyta           | Halymeniales   | Solyc03g031860.2.1 |
| <i>Grateloupia livida</i>          | Gli     | 297   | 1,00E-96  | ATQ35979        | ATQ35979             |  | Rhodophyta           | Halymeniales   | Solyc03g031860.2.1 |
| <i>Grateloupia turuturu</i>        | Gtu     | 298   | 7,00E-97  | ATQ35985        | ATQ35985             |  | Rhodophyta           | Halymeniales   | Solyc03g031860.2.1 |
| <i>Porphyridium purpureum</i>      | Ppu     | 306   | 8,00E-99  | KAA8491175      | KAA8491175           |  | Rhodophyta           | Porphyridiales | Solyc03g031860.2.1 |
| <i>Desmarestia viridis</i>         | Dvi     | 290   | 6,00E-94  | ATQ35993        | ATQ35993             |  | Ochrophyta           | Desmarestiales | Solyc03g031860.2.1 |
| <i>Dictyopteria undulata</i>       | Dun     | 286   | 1,00E-92  | ATQ35997        | ATQ35997             |  | Ochrophyta           | Dictyotales    | Solyc03g031860.2.1 |
| <i>Ectocarpus siliculosus</i>      | Esi     | 294   | 1,00E-94  | CBJ31337        | CBJ31337             | scaffold sctg_244                                    | Ochrophyta           | Ectocarpales   | Solyc03g031860.2.1 |
| <i>Ishige okamurae</i>             | Iok     | 293   | 6,00E-95  | ATQ35992        | ATQ35992             |  | Ochrophyta           | Ishigeales     | Solyc03g031860.2.1 |
| <i>Punctaria latifolia</i>         | Pla     | 295   | 3,00E-95  | ATQ35994        | ATQ35994             |  | Ochrophyta           | Ectocarpales   | Solyc03g031860.2.1 |
| <i>Sargassum hemiphyllum</i>       | She     | 295   | 1,00E-96  | ATQ36002        | ATQ36002             |  | Ochrophyta           | Fucales        | Solyc03g031860.2.1 |
| <i>Sargassum henslowianum</i>      | Shn     | 295   | 2,00E-96  | ATQ36001        | ATQ36001             |  | Ochrophyta           | Fucales        | Solyc03g031860.2.1 |

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|--|---------|-------|-----------|------------------------------|----------------------|---------------------------------------|----------------------|-----------------|--------------------|
| <i>Sargassum thunbergii</i>            | Sth     | 297   | 3,00E-96  | ATQ35998                     | ATQ35998             |                                       | Ochrophyta           | Fucales         | Solyc03g031860.2.1 |
| <i>Sargassum vachellianum</i>          | Sva     | 295   | 1,00E-95  | ATQ36000                     | ATQ36000             |                                       | Ochrophyta           | Fucales         | Solyc03g031860.2.1 |
| <i>Scytosiphon lomentaria</i>          | Slo     | 295   | 2,00E-95  | ATQ35995                     | ATQ35995             |                                       | Ochrophyta           | Ectocarpales    | Solyc03g031860.2.1 |
| <i>Undaria pinnatifida</i>             | Upi     | 291   | 4,00E-94  | ATQ35996                     | ATQ35996             |                                       | Ochrophyta           | Laminariales    | Solyc03g031860.2.1 |
| <i>Cyanobacteria bacterium</i>         | Cba     | 358   | 3,00E-121 | DNME01000182.1               | HBB31740.1           |                                       | Cyanophyta           | Chroococcales   | Solyc03g031860.2.1 |
| <i>Cyanobacteria bacterium</i>         | Cba     | 357   | 1,00E-120 | RFIF01000104.1               | RMF69129.1           |                                       | Cyanophyta           | Chroococcales   | Solyc03g031860.2.1 |
| <i>Cyanothece sp.</i>                  | Csp     | 360   | 8,00E-120 | NET36663                     | NET36663             | JAAHFT010000438.1:6921-7850           | Cyanophyta           | Oscillatoriales | Solyc03g031860.2.1 |
| <i>Desertifilum sp.</i>                | Dsp     | 365   | 7,00E-122 | NES97327                     | NES97327             |                                       | Cyanophyta           | Oscillatoriales | Solyc03g031860.2.1 |
| <i>Elainella sp.</i>                   | Els     | 348   | 3,00E-115 | MBF2049978                   | MBF2049978           | JACYLO010000073.1:11222-12151         | Cyanophyta           | Synechococcales | Solyc03g031860.2.1 |
| <i>Hydrocoleum sp.</i>                 | Hsp     | 348   | 5,00E-115 | OZH53043                     | OZH53043             | LGSU01001248.1:5456-6394              | Cyanophyta           | Oscillatoriales | Solyc03g031860.2.1 |
| <i>Leptolyngbyaceae cyanobacterium</i> | Lcy     | 360   | 2,00E-119 | NJR49961                     | NJR49961             | JAAUOZ010000055.1:27289-28224         | Cyanophyta           | Synechococcales | Solyc03g031860.2.1 |
| <i>Nostocales cyanobacterium</i>       | Ncy     | 348   | 3,00E-115 | TAE59201                     | TAE59201             | RDXV01000048.1:21825-22757            | Cyanophyta           | Nostocales      | Solyc03g031860.2.1 |
| <i>Okeania sp.</i>                     | Osp     | 348   | 5,00E-115 | NES03100                     | NES03100             | JAAHGT010000113.1:11469-12407         | Cyanophyta           | Oscillatoriales | Solyc03g031860.2.1 |
| <i>Oscillatoriales cyanobacterium</i>  | Ocy     | 349   | 1,00E-117 | OIP71133.1                   | OIP71133.1           |                                       | Cyanophyta           | Oscillatoriales | Solyc03g031860.2.1 |
| <i>Spirulinaceae cyanobacterium</i>    | Scy     | 348   | 4,00E-115 | NJK99192                     | NJK99192             | JAAUTY010000001.1:236214-237143       | Cyanophyta           | Spirulinales    | Solyc03g031860.2.1 |
| <i>Synechococcus elongatus</i>         | Sel     | 365   | 1,00E-123 | QFZ92142.1                   | QFZ92142.1           |                                       | Cyanophyta           | Synechococcales | Solyc03g031860.2.1 |
| <i>Thermosynechococcus elongatus</i>   | Tel     | 352   | 7,00E-119 | AXY68520.1                   | AXY68520.1           |                                       | Cyanophyta           | Synechococcales | Solyc03g031860.2.1 |
| <i>Chlamydomonas reinhardtii</i>       | Cre     | 402.1 | 3.3E-137  | Cre02.g095092.t1.1 (primary) | Cre02.g095092.t1.1   | chromosome_2:3336147..3340314 reverse | Chlorophyta          | Volvocales      | Solyc03g031860.2.1 |

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|------------------------------------|---------|-------|-----------|------------------------------|----------------------|--------------------------------------|----------------------|-------------------|--------------------|
| <i>Coccomyxa subellipsoidea</i>    | Csu     | 387.9 | 1,00E-132 | 52083 (primary)              | 52083                | scaffold_1:571729..575130 forward    | Chlorophyta          | Incertae sedis    | Solyc03g031860.2.1 |
| <i>Dunaliella salina</i>           | Das     | 404.8 | 6.3E-138  | Dusal.0943s00001.1 (primary) | Dusal.0943s00001.1   | scaffold943:9490..19698 reverse      | Chlorophyta          | Chlamydomonadales | Solyc03g031860.2.1 |
| <i>Dunaliella salina</i>           | Das     | 374.0 | 6.3E-126  | Dusal.0031s00032.1 (primary) | Dusal.0031s00032.1   | scaffold31:479535..492555 forward    | Chlorophyta          | Chlamydomonadales | Solyc03g031860.2.1 |
| <i>Micromonas pusilla</i>          | Mpu     | 385.6 | 1.5E-130  | 32317 (primary)              | 32317                | scaffold_3:822114..824691 reverse    | Chlorophyta          | Mamiellales       | Solyc03g031860.2.1 |
| <i>Micromonas sp</i>               | M       | 387.1 | 2.7E-132  | 85839 (primary)              | 85839                | Chr_10:705277..706335 forward        | Chlorophyta          | Mamiellales       | Solyc03g031860.2.1 |
| <i>Ostreococcus lucimarinus</i>    | Olu     | 349.7 | 7,00E-119 | 12559 (primary)              | 12559                | Chr_5:565049..565870 reverse         | Chlorophyta          | Mamiellales       | Solyc03g031860.2.1 |
| <i>Volvox carteri</i>              | Vca     | 402.5 | 2.2E-137  | Vocar.0027s0175.1            | Vocar.0027s0175.1    | scaffold_27:1630403..1637580 reverse | Chlorophyta          | Volvocales        | Solyc03g031860.2.1 |
| <i>Marchantia polymorpha</i>       | Mpo     | 532.7 | 0.0       | Mapoly0040s0104.1 (primary)  | Mapoly0040s0104.1    | scaffold_40:1067130..1071400 forward | Bryophyta            | Marchantiales     | Solyc03g031860.2.1 |
| <i>Physcomitrella patens</i>       | Ppa     | 531.6 | 0.0       | Pp3c24_10180V3.1 (primary)   | Pp3c24_10180V3.1     | Chr24:6938725..6942585 forward       | Bryophyta            | Funariales        | Solyc03g031860.2.1 |
| <i>Physcomitrella patens</i>       | Ppa     | 520   | 0.0       | Pp3c8_21760V3.1 (primary)    | Pp3c8_21760V3.1      | Chr08:14919012..14922846 forward     | Bryophyta            | Funariales        | Solyc03g031860.2.1 |
| <i>Physcomitrella patens</i>       | Ppa     | 518.9 | 0.0       | Pp3c24_16380V3.1 (primary)   | Pp3c24_16380V3.1     | Chr24:10757319..10761131 forward     | Bryophyta            | Funariales        | Solyc03g031860.2.1 |
| <i>Sphagnum fallax</i>             | Sfa     | 521.9 | 0.0       | Sphfalx0049s0098.1 (primary) | Sphfalx0049s0098.1   | super_49:1449572..1454449 reverse    | Bryophyta            | Sphagnales        | Solyc03g031860.2.1 |
| <i>Aspergillus costaricensis</i>   | Acs     | 82    | 7,00E-14  | XP_025539973                 | XP_025539973         |                                      | Fungi                | Eurotiales        | Solyc03g031860.2.1 |
| <i>Aspergillus luchuensis</i>      | Alu     | 83,2  | 5,00E-15  | GAT30047                     | GAT30047             | map: 6-6 F, contig: AAI_SCon_033     | Fungi                | Eurotiales        | Solyc03g031860.2.1 |
| <i>Aspergillus neoniger</i>        | Ane     | 80,9  | 2,00E-13  | XP_025475515                 | XP_025475515         |                                      | Fungi                | Eurotiales        | Solyc03g031860.2.1 |
| <i>Aspergillus piperis</i>         | Api     | 83,2  | 5,00E-15  | XP_025516982                 | XP_025516982         |                                      | Fungi                | Eurotiales        | Solyc03g031860.2.1 |
| <i>Colletotrichum higginsianum</i> | Chi     | 75,1  | 8,00E-12  | CCF46103                     | CCF46103             | contig cont1.829                     | Fungi                | Glomerellales     | Solyc03g031860.2.1 |
| <i>Fusarium albosuccineum</i>      | Fal     | 77    | 1,00E-12  | KAF4458563                   | KAF4458563           |                                      | Fungi                | Hypocreales       | Solyc03g031860.2.1 |

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|-------------------------------------|---------|--------|-----------|---------------------|----------------------|--|----------------------|-----------------|--------------------------------|
| <i>Nannizzia gypsea</i>             | Ngy     | 80,9   | 2,00E-13  | XP_003174566        | XP_003174566         |  | Fungi                | Onygenales      | Solyc03g031860.2.1             |
| <i>Pyrenophora seminiperda</i>      | Pse     | 94,4   | 9,00E-18  | RMZ72926            | RMZ72926             | scaffold00043  | Fungi                | Pleosporales    | Solyc03g031860.2.1             |
| <i>Pyrenophora tritici-repentis</i> | Pti     | 89     | 2,00E-16  | KAA8614953          | KAA8614953           | V1_contig_00009  | Fungi                | Pleosporales    | Solyc03g031860.2.1             |
| <i>Rosellinia necatrix</i>          | Rne     | 76,3   | 5,00E-12  | GAP92111            | GAP92111             | scaffold: Contig75                                       | Fungi                | Xylariales      | Solyc03g031860.2.1             |
| <i>Acyrtosiphon pisum</i>           | Aps     | 64,7   | 1,00E-08  | XP_003241668        | XP_003241668         |  | Arthropoda           | Hemiptera       | Solyc03g031860.2.1             |
| <i>Drosophila bipunctata</i>        | Dbi     | 93,6   | 6,00E-19  | XP_017095802        | XP_017095802         |  | Arthropoda           | Diptera         | Solyc03g031860.2.1             |
| <i>Drosophila elegans</i>           | Del     | 93,2   | 8,00E-19  | XP_017118015        | XP_017118015         |  | Arthropoda           | Diptera         | Solyc03g031860.2.1             |
| <i>Drosophila eugracilis</i>        | Deu     | 108    | 3,00E-24  | XP_017070630        | XP_017070630         |  | Arthropoda           | Diptera         | Solyc03g031860.2.1             |
| <i>Drosophila ficusphila</i>        | Dfi     | 109    | 7,00E-25  | XP_017040643        | XP_017040643         |  | Arthropoda           | Diptera         | Solyc03g031860.2.1             |
| <i>Drosophila kikkawai</i>          | Dki     | 93,2   | 7,00E-19  | XP_017032848        | XP_017032848         |  | Arthropoda           | Diptera         | Solyc03g031860.2.1             |
| <i>Tetranychus urticae</i>          | Tut     | 56     | 0.00035   | tetur01g11260       | DAA34969.1           | SuperContig HE587301: 5,209,423-5,213,678 reverse strand | Arthropoda           | Trombidiformes  | Tetranychus urticae ASM23943v1 |
| <i>Klebsormidium nitens</i>         | Kni     | 448    | 3,00E-154 | kfl00019_0320_v1 .1 | kfl00019_0320        |  | Charophyta           | Klebsormidiales | Solyc03g031860.2.1             |
| <i>Selaginella moellendorffii</i>   | Smo     | 523.1  | 0.0       | 233658 (primary)    | 233658               | scaffold_47:782646..784025 forward                       | Lycophytes           | Selaginellales  | Solyc03g031860.2.1             |
| <i>Picea abies</i>                  | Pab     | 567,38 | 0.0       | MA_86494g0010       | MA_86494g0010        | MA_86494:2318..6959                                      | Gymnosperm           | Pinales         | Solyc03g031860.2.1             |
| <i>Picea abies</i>                  | Pab     | 236,5  | 0.0       | MA_407452g0010      | MA_407452g0010       | MA_407452:1629..2244                                     | Gymnosperm           | Pinales         | Solyc03g031860.2.1             |
| <i>Pinus taeda</i>                  | Pta     | 539,26 | 0.0       | PITA_000050116      | PITA_000050116       | Scaffold 880084.2:2751..7208                             | Gymnosperm           | Pinales         | Solyc03g031860.2.1             |
| <i>Pinus taeda</i>                  | Pta     | 480,71 | 9,83E-170 | PITA_000002541      | PITA_000002541       | tscaffold 4861:26078..42463                              | Gymnosperm           | Pinales         | Solyc03g031860.2.1             |

| Species                        | Acronym    | Score | Evalue    | Transcript Name  | CDS Accession Number                           | Location  | Classification group   | Order        | Query                     |
|--------------------------------|------------|-------|-----------|--|--|---|------------------------|--------------|---------------------------|
| <i>Amborella trichopoda</i>    | <i>Atr</i> | 562   | 0.0       | <i>evm_27.model.AmTr_v1.0_scaffold00032.92 (primary)</i> | <i>evm_27.model.AmTr_v1.0_scaffold00032.92</i> | <i>AmTr_v1.0_scaffold00032:1823840..1832740 reverse</i> | Early angiosperm       | Amborellales | <i>Solyc03g031860.2.1</i> |
| <i>Amborella trichopoda</i>    | <i>Atr</i> | 537.3 | 0.0       | <i>evm_27.model.AmTr_v1.0_scaffold00044.14 (primary)</i> | <i>evm_27.model.AmTr_v1.0_scaffold00044.14</i> | <i>AmTr_v1.0_scaffold00044:320296..333892 reverse</i>   | Early angiosperm       | Amborellales | <i>Solyc03g031860.2.1</i> |
| <i>Spirodela polyrhiza</i>     | <i>Spo</i> | 602.4 | 0.0       | <i>Spipo1G0051600 (primary)</i>                          | <i>Spipo1G0051600</i>                          | <i>pseudo1:3342204..3344393 forward</i>                 | Monocots               | Alismatales  | <i>Solyc03g031860.2.1</i> |
| <i>Spirodela polyrhiza</i>     | <i>Spo</i> | 546.6 | 0.0       | <i>Spipo8G0020300 (primary)</i>                          | <i>Spipo8G0020300</i>                          | <i>pseudo8:2050614..2052383 reverse</i>                 | Monocots               | Alismatales  | <i>Solyc03g031860.2.1</i> |
| <i>Zostera marina</i>          | <i>Zmr</i> | 569.7 | 0.0       | <i>Zosma16g00900.1</i>                                   | <i>Zosma16g00900.1</i>                         | <i>scaffold_16:567834..570010 reverse</i>               | Monocots               | Alismatales  | <i>Solyc03g031860.2.1</i> |
| <i>Aegilops tauschii</i>       | <i>Ata</i> | 1276  | 3,00E-168 | <i>AET7Gv21342500.2</i>                                  | <i>AET7Gv21342500</i>                          | Chromosome 7D: 639,162,008-639,167,161 reverse strand.  | Monocots (commelinids) | Poales       | <i>Solyc03g031860.2.1</i> |
| <i>Aegilops tauschii</i>       | <i>Ata</i> | 1254  | 3,40E-165 | <i>AET5Gv20068500.3</i>                                  | <i>AET5Gv20068500</i>                          | Chromosome 5D: 26,757,085-26,760,088 reverse strand.    | Monocots (commelinids) | Poales       | <i>Solyc03g031860.2.1</i> |
| <i>Aegilops tauschii</i>       | <i>Ata</i> | 753   | 1,10E-95  | <i>AET5Gv20828700.1</i>                                  | <i>AET5Gv20828700</i>                          | Chromosome 5D: 450,481,493-450,484,002 forward strand   | Monocots (commelinids) | Poales       | <i>Solyc03g031860.2.1</i> |
| <i>Ananas comosus</i>          | <i>Aco</i> | 581.3 | 0.0       | <i>Aco013002.1 (primary)</i>                             | <i>Aco013002.1</i>                             | <i>LG25:1393795..1396471 reverse</i>                    | Monocots (commelinids) | Poales       | <i>Solyc03g031860.2.1</i> |
| <i>Ananas comosus</i>          | <i>Aco</i> | 575.5 | 0.0       | <i>Aco009217.1 (primary)</i>                             | <i>Aco009217.1</i>                             | <i>LG22:8546722..8558411 reverse</i>                    | Monocots (commelinids) | Poales       | <i>Solyc03g031860.2.1</i> |
| <i>Ananas comosus</i>          | <i>Aco</i> | 541.6 | 0.0       | <i>Aco005022.1 (primary)</i>                             | <i>Aco005022.1</i>                             | <i>LG07:1487658..1490439 forward</i>                    | Monocots (commelinids) | Poales       | <i>Solyc03g031860.2.1</i> |
| <i>Brachypodium distachyon</i> | <i>Bdi</i> | 549.7 | 0.0       | <i>Bradi1g29590.2 (primary)</i>                          | <i>Bradi1g29590.2</i>                          | <i>Bd1:25177642..25181644 forward</i>                   | Monocots (commelinids) | Poales       | <i>Solyc03g031860.2.1</i> |
| <i>Brachypodium distachyon</i> | <i>Bdi</i> | 510.0 | 3.8E-179  | <i>Bradi4g01100.1 (primary)</i>                          | <i>Bradi4g01100.1</i>                          | <i>Bd4:683690..687242 reverse</i>                       | Monocots (commelinids) | Poales       | <i>Solyc03g031860.2.1</i> |
| <i>Brachypodium distachyon</i> | <i>Bdi</i> | 494.2 | 4.6E-173  | <i>Bradi4g37520.1 (primary)</i>                          | <i>Bradi4g37520.1</i>                          | <i>Bd4:42521097..42524510 reverse</i>                   | Monocots (commelinids) | Poales       | <i>Solyc03g031860.2.1</i> |
| <i>Brachypodium stacei</i>     | <i>Bst</i> | 554.3 | 0.0       | <i>Brast07G241400.1 (primary)</i>                        | <i>Brast07G241400.1</i>                        | <i>Chr07:20604273..20608120 reverse</i>                 | Monocots (commelinids) | Poales       | <i>Solyc03g031860.2.1</i> |
| <i>Brachypodium stacei</i>     | <i>Bst</i> | 513.1 | 1.3E-180  | <i>Brast10G009800.1 (primary)</i>                        | <i>Brast10G009800.1</i>                        | <i>Chr10:577285..580570 reverse</i>                     | Monocots (commelinids) | Poales       | <i>Solyc03g031860.2.1</i> |

| Species                    | Acronym | Score | Evalue    | Transcript Name                         | CDS Accession Number          | Location  | Classification group   | Order        | Query              |
|----------------------------|---------|-------|-----------|---|-------------------------------|---|------------------------|--------------|--------------------|
| <i>Brachypodium stacei</i> | Bst     | 488.4 | 9.2E-171  | Brast05G209700.1 (primary)              | Brast05G209700.1              | Chr05:17783948..17786829 reverse                          | Monocots (commelinids) | Poales       | Solyc03g031860.2.1 |
| <i>Eragrostis tef</i>      | Ete     | 391   | 7,70E-118 | Et_s3092-0.38-1.mrna1                   | Et_s3092                      | SuperContig scaffold3092: 12,555-15,280 forward strand    | Monocots (commelinids) | Poales       | Solyc03g031860.2.1 |
| <i>Eragrostis tef</i>      | Ete     | 372   | 4,00E-103 | Et_s1813-1.34-1.mrna1                   | Et_s1813                      | SuperContig scaffold1813: 173,520-176,190 forward strand  | Monocots (commelinids) | Poales       | Solyc03g031860.2.1 |
| <i>Eragrostis tef</i>      | Ete     | 371   | 8,10E-125 | Et_s7091-0.40-1.mrna1                   | Et_s7091                      | SuperContig scaffold7091: 10,905-13,395 forward strand    | Monocots (commelinids) | Poales       | Solyc03g031860.2.1 |
| <i>Eragrostis tef</i>      | Ete     | 351   | 7,00E-128 | Et_s517-0.16-1.mrna1                    | Et_s517                       | SuperContig scaffold517: 41,323-45,588 forward strand.    | Monocots (commelinids) | Poales       | Solyc03g031860.2.1 |
| <i>Eragrostis tef</i>      | Ete     | 349   | 1,20E-129 | Et_s4159-0.20-1.mrna1                   | Et_s4159                      | SuperContig scaffold4159: 66,805-70,707 reverse strand    | Monocots (commelinids) | Poales       | Solyc03g031860.2.1 |
| <i>Hordeum vulgare</i>     | Hvu     | 1269  | 2,80E-167 | HORVU7Hr1G120660.3                      | HORVU7Hr1G120660              | Chromosome chr7H: 652,117,486-652,121,143 forward strand. | Monocots (commelinids) | Poales       | Solyc03g031860.2.1 |
| <i>Hordeum vulgare</i>     | Hvu     | 1258  | 9,30E-166 | HORVU5Hr1G005740.2                      | HORVU5Hr1G005740              | Chromosome chr5H: 9,252,064-9,255,073 reverse strand      | Monocots (commelinids) | Poales       | Solyc03g031860.2.1 |
| <i>Hordeum vulgare</i>     | Hvu     | 750   | 2,90E-95  | HORVU5Hr1G088130.4                      | HORVU5Hr1G088130              | Chromosome chr5H: 580,830,866-580,832,556 forward strand  | Monocots (commelinids) | Poales       | Solyc03g031860.2.1 |
| <i>Leersia perrieri</i>    | Lpe     | 1309  | 1,70E-173 | LPERR06G23640.1                         | LPERR06G23640                 | Chromosome 6: 20,892,913-20,895,557 reverse strand.       | Monocots (commelinids) | Poales       | Solyc03g031860.2.1 |
| <i>Leersia perrieri</i>    | Lpe     | 1259  | 1,50E-166 | LPERR12G16110.1                         | LPERR12G16110                 | Chromosome 12: 16,999,952-17,002,773 reverse strand       | Monocots (commelinids) | Poales       | Solyc03g031860.2.1 |
| <i>Leersia perrieri</i>    | Lpe     | 794   | 4,90E-102 | LPERR09G15010.1                         | LPERR09G15010                 | Chromosome 9: 14,625,116-14,627,798 reverse strand.       | Monocots (commelinids) | Poales       | Solyc03g031860.2.1 |
| <i>Leersia perrieri</i>    | Lpe     | 763   | 9,90E-98  | LPERR09G15000.1                         | LPERR09G15000                 | Chromosome 9: 14,619,828-14,622,601 reverse strand        | Monocots (commelinids) | Poales       | Solyc03g031860.2.1 |
| <i>Musa acuminata</i>      | Mac     | 599   | 0.0       | GSMUA_AchrUn_randomT09240_001 (primary) | GSMUA_AchrUn_randomT09240_001 | chrUn_random:42933000..42935315 reverse                   | Monocots (commelinids) | Zingiberales | Solyc03g031860.2.1 |



| Species                   | Acronym | Score | Evalue    | Transcript Name                        | CDS Accession Number      | Location  | Classification group      | Order        | Query              |
|---------------------------|---------|-------|-----------|--|---------------------------|---|---------------------------|--------------|--------------------|
| <i>Musa acuminata</i>     | Mac     | 560.1 | 0.0       | GSMUA_Achr9T10050_001<br>(primary)     | GSMUA_Achr9T10050_001     | chr9:6467097..6469206<br>forward                            | Monocots<br>(commelinids) | Zingiberales | Solyc03g031860.2.1 |
| <i>Musa acuminata</i>     | Mac     | 537.3 | 0.0       | GSMUA_Achr6T31560_001<br>(primary)     | GSMUA_Achr6T31560_001     | chr6:31294343..31298625<br>reverse                          | Monocots<br>(commelinids) | Zingiberales | Solyc03g031860.2.1 |
| <i>Musa acuminata</i>     | Mac     | 527.3 | 0.0       | GSMUA_Achr11T07450_001<br>(primary)    | GSMUA_Achr11T07450_001    | chr11:5827293..5829074<br>reverse                           | Monocots<br>(commelinids) | Zingiberales | Solyc03g031860.2.1 |
| <i>Oropetium thomaeum</i> | Oth     | 566.2 | 0.0       | Oropetium_20150105_16450A<br>(primary) | Oropetium_20150105_16450A | Oropetium_genomic_20141112_058:1394996..1399216<br>reverse  | Monocots<br>(commelinids) | Poales       | Solyc03g031860.2.1 |
| <i>Oropetium thomaeum</i> | Oth     | 501.1 | 9,00E-176 | Oropetium_20150105_06439A<br>(primary) | Oropetium_20150105_06439A | Oropetium_genomic_20141112_007:2298318..2301541<br>forward  | Monocots<br>(commelinids) | Poales       | Solyc03g031860.2.1 |
| <i>Oropetium thomaeum</i> | Oth     | 435.3 | 3.2E-2    | Oropetium_20150105_26131A<br>(primary) | Oropetium_20150105_26131A | Oropetium_genomic_20141112_128:102591..105980<br>reverse    | Monocots<br>(commelinids) | Poales       | Solyc03g031860.2.1 |
| <i>Oryza barthii</i>      | Oba     | 1304  | 7,90E-173 | OBART06G28180.1                        | OBART06G28180             | Chromosome 6: 25,547,527-25,550,534 reverse strand.         | Monocots<br>(commelinids) | Poales       | Solyc03g031860.2.1 |
| <i>Oryza barthii</i>      | Oba     | 1250  | 2,50E-165 | OBART12G19460.1                        | OBART12G19460             | Chromosome 12: 19,871,917-19,874,707 reverse strand         | Monocots<br>(commelinids) | Poales       | Solyc03g031860.2.1 |
| <i>Oryza barthii</i>      | Oba     | 785   | 8,40E-101 | OBART09G19150.1                        | OBART09G19150             | Chromosome 9: 18,232,450-18,235,912 reverse strand.         | Monocots<br>(commelinids) | Poales       | Solyc03g031860.2.1 |
| <i>Oryza brachyantha</i>  | Obr     | 1291  | 3,30E-171 | OB06G35940.1                           | OB06G35940                | Chromosome 6: 21,655,842-21,658,741 reverse strand.         | Monocots<br>(commelinids) | Poales       | Solyc03g031860.2.1 |
| <i>Oryza brachyantha</i>  | Obr     | 1131  | 5,40E-149 | OB12G26220.1                           | OB12G26220                | Chromosome 12: 14,756,519-14,759,775 forward strand.        | Monocots<br>(commelinids) | Poales       | Solyc03g031860.2.1 |
| <i>Oryza brachyantha</i>  | Obr     | 1076  | 2,30E-141 | OB09G25760.1                           | OB09G25760                | Chromosome 9: 13,346,492-13,348,554 reverse strand.         | Monocots<br>(commelinids) | Poales       | Solyc03g031860.2.1 |
| <i>Oryza glaberrima</i>   | Ogl     | 1304  | 5,60E-173 | ORGLA06G0287600.1                      | ORGLA06G0287600           | Scaffold Oglab06_unplaced183: 46,183-49,189 reverse strand. | Monocots<br>(commelinids) | Poales       | Solyc03g031860.2.1 |

| Species                     | Acronym | Score | Evalue    | Transcript Name   | CDS Accession Number | Location   | Classification group   | Order  | Query              |
|-----------------------------|---------|-------|-----------|-------------------|----------------------|--|------------------------|--------|--------------------|
| <i>Oryza glaberrima</i>     | Ogl     | 1256  | 2,60E-166 | ORGLA12G0167800.1 | ORGLA12G0167800      | Chromosome 12: 18,361,617-18,364,404 reverse strand. | Monocots (commelinids) | Poales | Solyc03g031860.2.1 |
| <i>Oryza glaberrima</i>     | Ogl     | 1200  | 1,50E-158 | ORGLA09G0153600.1 | ORGLA09G0153600      | Chromosome 9: 16,481,944-16,484,415 reverse strand   | Monocots (commelinids) | Poales | Solyc03g031860.2.1 |
| <i>Oryza glumipatula</i>    | Ogu     | 1304  | 9,10E-173 | OGLUM06G29570.1   | OGLUM06G29570        | Chromosome 6: 31,354,021-31,357,030 reverse strand   | Monocots (commelinids) | Poales | Solyc03g031860.2.1 |
| <i>Oryza glumipatula</i>    | Ogu     | 1250  | 2,80E-165 | OGLUM12G21130.1   | OGLUM12G21130        | Chromosome 12: 25,999,396-26,003,333 forward strand. | Monocots (commelinids) | Poales | Solyc03g031860.2.1 |
| <i>Oryza glumipatula</i>    | Ogu     | 694   | 4,10E-88  | OGLUM09G19690.1   | OGLUM09G19690        | Chromosome 9: 22,265,018-22,267,694 reverse strand.  | Monocots (commelinids) | Poales | Solyc03g031860.2.1 |
| <i>Oryza longistaminata</i> | Olo     | 1311  | 5,80E-174 | KN538785.1_FGT003 | KN538785             | Scaffold KN538785.1: 152,026-154,808 reverse strand  | Monocots (commelinids) | Poales | Solyc03g031860.2.1 |
| <i>Oryza longistaminata</i> | Olo     | 1088  | 5,10E-143 | KN538757.1_FGT004 | KN538757             | Scaffold KN538757.1: 172,790-184,307 forward strand. | Monocots (commelinids) | Poales | Solyc03g031860.2.1 |
| <i>Oryza longistaminata</i> | Olo     | 764   | 4,70E-98  | KN540821.1_FGT003 | KN540821             | Scaffold KN540821.1: 12,579-18,354 forward strand    | Monocots (commelinids) | Poales | Solyc03g031860.2.1 |
| <i>Oryza meridionalis</i>   | Ome     | 1304  | 8,70E-173 | OMERI06G28090.5   | OMERI06G28090        | Chromosome 6: 31,628,915-31,633,028 reverse strand.  | Monocots (commelinids) | Poales | Solyc03g031860.2.1 |
| <i>Oryza meridionalis</i>   | Ome     | 1195  | 1,20E-157 | OMERI09G14390.1   | OMERI09G14390        | Chromosome 9: 17,923,693-17,929,959 reverse strand.  | Monocots (commelinids) | Poales | Solyc03g031860.2.1 |
| <i>Oryza meridionalis</i>   | Ome     | 1180  | 1,40E-155 | OMERI12G14330.1   | OMERI12G14330        | Chromosome 12: 19,269,363-19,282,654 reverse strand. | Monocots (commelinids) | Poales | Solyc03g031860.2.1 |
| <i>Oryza punctata</i>       | Opu     | 1306  | 4,50E-173 | OPUNC06G25700.2   | OPUNC06G25700        | Chromosome 6: 34,382,050-34,384,709 reverse strand.  | Monocots (commelinids) | Poales | Solyc03g031860.2.1 |
| <i>Oryza punctata</i>       | Opu     | 1206  | 1,10E-166 | OPUNC12G17610.1   | OPUNC12G17610        | Chromosome 12: 27,114,787-27,119,055 forward strand. | Monocots (commelinids) | Poales | Solyc03g031860.2.1 |
| <i>Oryza punctata</i>       | Opu     | 1201  | 1,70E-158 | OPUNC09G17510.1   | OPUNC09G17510        | Chromosome 9: 25,407,635-25,409,731 reverse strand.  | Monocots (commelinids) | Poales | Solyc03g031860.2.1 |
| <i>Oryza rufipogon</i>      | Oru     | 1304  | 9,30E-173 | ORUFI06G30110.1   | ORUFI06G30110        | Chromosome 6: 27,682,342-27,686,178 reverse strand.  | Monocots (commelinids) | Poales | Solyc03g031860.2.1 |

| Species                     | Acronym | Score | Evalue    | Transcript Name            | CDS Accession Number | Location   | Classification group   | Order  | Query              |
|-----------------------------|---------|-------|-----------|----------------------------|----------------------|--|------------------------|--------|--------------------|
| <i>Oryza rufipogon</i>      | Oru     | 1205  | 2,90E-165 | ORUF112G21740.1            | ORUF112G21740        | Chromosome 12: 22,831,897-22,834,687 reverse strand. | Monocots (commelinids) | Poales | Solyc03g031860.2.1 |
| <i>Oryza rufipogon</i>      | Oru     | 793   | 7,60E-102 | ORUF109G20730.1            | ORUF109G20730        | Chromosome 9: 19,611,150-19,617,449 reverse strand   | Monocots (commelinids) | Poales | Solyc03g031860.2.1 |
| <i>Oryza sativa</i>         | Osa     | 563.1 | 0.0       | LOC_Os06g51290.1 (primary) | LOC_Os06g51290.1     | Chr6:31051971..31055926 reverse                      | Monocots (commelinids) | Poales | Solyc03g031860.2.1 |
| <i>Oryza sativa</i>         | Osa     | 514.6 | 0.0       | LOC_Os12g43130.1 (primary) | LOC_Os12g43130.1     | Chr12:26780487..26783598 reverse                     | Monocots (commelinids) | Poales | Solyc03g031860.2.1 |
| <i>Oryza sativa</i>         | Osa     | 491.5 | 3.3E-171  | LOC_Os09g38320.1 (primary) | LOC_Os09g38320.1     | Chr9:22041967..22045393 reverse                      | Monocots (commelinids) | Poales | Solyc03g031860.2.1 |
| <i>Panicum hallii</i>       | Pha     | 572.0 | 0.0       | Pahal.D00247.1 (primary)   | Pahal.D00247.1       | Chr04:226949..230520 forward                         | Monocots (commelinids) | Poales | Solyc03g031860.2.1 |
| <i>Panicum hallii</i>       | Pha     | 517.3 | 0.0       | Pahal.C04830.1 (primary)   | Pahal.C04830.1       | Chr03:63469691..63473041 forward                     | Monocots (commelinids) | Poales | Solyc03g031860.2.1 |
| <i>Panicum hallii</i>       | Pha     | 507.7 | 1,00E-177 | Pahal.B03778.1 (primary)   | Pahal.B03778.1       | Chr02:52670089..52674217 reverse                     | Monocots (commelinids) | Poales | Solyc03g031860.2.1 |
| <i>Panicum virgatum</i>     | Pvi     | 575.1 | 0.0       | Pavir.J02631.1 (primary)   | Pavir.J02631.1       | contig03129:15958..19364 reverse                     | Monocots (commelinids) | Poales | Solyc03g031860.2.1 |
| <i>Panicum virgatum</i>     | Pvi     | 569.3 | 0.0       | Pavir.Db00050.1 (primary)  | Pavir.Db00050.1      | Chr04b:736370..740005 reverse                        | Monocots (commelinids) | Poales | Solyc03g031860.2.1 |
| <i>Panicum virgatum</i>     | Pvi     | 518.5 | 0.0       | Pavir.Db01083.1 (primary)  | Pavir.Db01083.1      | Chr04b:19360788..19363716 forward                    | Monocots (commelinids) | Poales | Solyc03g031860.2.1 |
| <i>Panicum virgatum</i>     | Pvi     | 501.5 | 2.4E-176  | Pavir.Ba01490.1 (primary)  | Pavir.Ba01490.1      | Chr02a:19032833..19035996 reverse                    | Monocots (commelinids) | Poales | Solyc03g031860.2.1 |
| <i>Panicum virgatum</i>     | Pvi     | 490.3 | 1.1E-172  | Pavir.Bb02573.1 (primary)  | Pavir.Bb02573.1      | Chr02b:59338774..59341023 reverse                    | Monocots (commelinids) | Poales | Solyc03g031860.2.1 |
| <i>Panicum virgatum</i>     | Pvi     | 455.7 | 1.4E-159  | Pavir.Cb00105.1 (primary)  | Pavir.Cb00105.1      | Chr03b:1647112..1649439 forward                      | Monocots (commelinids) | Poales | Solyc03g031860.2.1 |
| <i>Saccharum spontaneum</i> | Ssp     | 384   | 2,50E-125 | Sspon.08G0000480-1A-mRNA-1 | Sspon_08G0000480     | Chromosome 8A: 1,745,103-1,748,728 forward strand    | Monocots (commelinids) | Poales | Solyc03g031860.2.1 |
| <i>Setaria italica</i>      | Sit     | 570.5 | 0.0       | Seita.4G288600.1 (primary) | Seita.4G288600.1     | scaffold_4:40043909..40046902 reverse                | Monocots (commelinids) | Poales | Solyc03g031860.2.1 |
| <i>Setaria italica</i>      | Sit     | 519.2 | 0.0       | Seita.3G397800.1 (primary) | Seita.3G397800.1     | scaffold_3:49831722..49834779 forward                | Monocots (commelinids) | Poales | Solyc03g031860.2.1 |
| <i>Setaria italica</i>      | Sit     | 503.8 | 3.4E-176  | Seita.2G303000.1 (primary) | Seita.2G303000.1     | scaffold_2:39561335..39564733 reverse                | Monocots (commelinids) | Poales | Solyc03g031860.2.1 |

| Species                  | Acronym | Score | Evalue    | Transcript Name              | CDS Accession Number | Location   | Classification group   | Order  | Query              |
|--------------------------|---------|-------|-----------|------------------------------|----------------------|--|------------------------|--------|--------------------|
| <i>Setaria viridis</i>   | Svi     | 568.2 | 0.0       | Sevir.4G300900.1 (primary)   | Sevir.4G300900.1     | Chr_04:39324444..39327897 reverse                      | Monocots (commelinids) | Poales | Solyc03g031860.2.1 |
| <i>Setaria viridis</i>   | Svi     | 518.5 | 0.0       | Sevir.3G415800.1 (primary)   | Sevir.3G415800.1     | Chr_03:48966579..48969560 forward                      | Monocots (commelinids) | Poales | Solyc03g031860.2.1 |
| <i>Setaria viridis</i>   | Svi     | 504.6 | 2.1E-176  | Sevir.2G314000.1 (primary)   | Sevir.2G314000.1     | Chr_02:38422397..38427143 reverse                      | Monocots (commelinids) | Poales | Solyc03g031860.2.1 |
| <i>Sorghum bicolor</i>   | Sbi     | 526.2 | 0.0       | Sobic.008G180800.1 (primary) | Sobic.008G180800.1   | Chr08:61419851..61422820 forward                       | Monocots (commelinids) | Poales | Solyc03g031860.2.1 |
| <i>Sorghum bicolor</i>   | Sbi     | 508.8 | 4.9E-178  | Sobic.002G292600.1 (primary) | Sobic.002G292600.1   | Chr02:67031565..67034288 reverse                       | Monocots (commelinids) | Poales | Solyc03g031860.2.1 |
| <i>Triticum aestivum</i> | Tae     | 1276  | 2,10E-168 | TraesCS7D02G553300.1         | TraesCS7D02G553300   | Chromosome 7D: 636,765,931-636,771,068 forward strand  | Monocots (commelinids) | Poales | Solyc03g031860.2.1 |
| <i>Triticum aestivum</i> | Tae     | 1273  | 5,60E-168 | TraesCS7A02G557300.2         | TraesCS7A02G557300   | Chromosome 7A: 729,397,165-729,401,834 reverse strand. | Monocots (commelinids) | Poales | Solyc03g031860.2.1 |
| <i>Triticum aestivum</i> | Tae     | 1270  | 1,50E-167 | TraesCS7B02G482000.1         | TraesCS7B02G482000   | Chromosome 7B: 739,442,097-739,446,001 reverse strand  | Monocots (commelinids) | Poales | Solyc03g031860.2.1 |
| <i>Triticum aestivum</i> | Tae     | 1254  | 2,40E-165 | TraesCS5D02G026000.1         | TraesCS5D02G026000   | Chromosome 5D: 23,296,528-23,299,514 reverse strand.   | Monocots (commelinids) | Poales | Solyc03g031860.2.1 |
| <i>Triticum aestivum</i> | Tae     | 1254  | 2,40E-165 | TraesCS5B02G017900.1         | TraesCS5B02G017900   | Chromosome 5B: 17,544,779-17,547,737 reverse strand.   | Monocots (commelinids) | Poales | Solyc03g031860.2.1 |
| <i>Triticum aestivum</i> | Tae     | 1251  | 6,30E-165 | TraesCS5A02G020900.1         | TraesCS5A02G020900   | Chromosome 5A: 17,221,404-17,224,338 reverse strand.   | Monocots (commelinids) | Poales | Solyc03g031860.2.1 |
| <i>Triticum aestivum</i> | Tae     | 763   | 3,30E-97  | TraesCS5A02G356300.2         | TraesCS5A02G356300   | Chromosome 5A: 558,682,954-558,688,761 forward strand  | Monocots (commelinids) | Poales | Solyc03g031860.2.1 |
| <i>Triticum aestivum</i> | Tae     | 758   | 1,60E-96  | TraesCS5B02G358800.1         | TraesCS5B02G358800   | Chromosome 5B: 538,717,321-538,719,110 forward strand. | Monocots (commelinids) | Poales | Solyc03g031860.2.1 |
| <i>Triticum aestivum</i> | Tae     | 753   | 8,10E-96  | TraesCS5D02G365100.1         | TraesCS5D02G365100   | Chromosome 5D: 442,496,502-442,498,524 forward strand  | Monocots (commelinids) | Poales | Solyc03g031860.2.1 |

| Species                     | Acronym | Score | Evalue    | Transcript Name        | CDS Accession Number | Location   | Classification group      | Order  | Query                  |
|-----------------------------|---------|-------|-----------|------------------------|----------------------|--|---------------------------|--------|------------------------|
| <i>Triticum dicoccoides</i> | Tdi     | 1273  | 9,10E-168 | TRIDC7AG07732<br>0.6   | TRIDC7AG077320       | Chromosome 7A:<br>721,057,396-<br>721,061,077 reverse strand   | Monocots<br>(commelinids) | Poales | Solyc03g031<br>860.2.1 |
| <i>Triticum dicoccoides</i> | Tdi     | 1259  | 7,90E-166 | TRIDC7BG07378<br>0.3   | TRIDC7BG073780       | Chromosome 7B:<br>739,010,245-<br>739,013,465 forward strand.  | Monocots<br>(commelinids) | Poales | Solyc03g031<br>860.2.1 |
| <i>Triticum dicoccoides</i> | Tdi     | 1251  | 1,00E-164 | TRIDC5AG00290<br>0.4   | TRIDC5AG002900       | Chromosome 5A:<br>16,297,965-<br>16,300,537 reverse strand.    | Monocots<br>(commelinids) | Poales | Solyc03g031<br>860.2.1 |
| <i>Triticum dicoccoides</i> | Tdi     | 758   | 2,70E-96  | TRIDC5BG05642<br>0.1   | TRIDC5BG056420       | Chromosome 5B:<br>544,909,913-<br>544,911,433 forward strand.  | Monocots<br>(commelinids) | Poales | Solyc03g031<br>860.2.1 |
| <i>Triticum dicoccoides</i> | Tdi     | 677   | 4,70E-85  | TRIDC5AG05206<br>0.3   | TRIDC5AG052060       | Chromosome 5A:<br>554,272,803-<br>554,273,524 forward strand   | Monocots<br>(commelinids) | Poales | Solyc03g031<br>860.2.1 |
| <i>Triticum turgidum</i>    | Ttu     | 1281  | 6,60E-169 | TRITD6Bv1G2285<br>70.1 | TRITD6Bv1G228570     | Chromosome 6B:<br>696,979,833-<br>696,983,031 forward strand   | Monocots<br>(commelinids) | Poales | Solyc03g031<br>860.2.1 |
| <i>Triticum turgidum</i>    | Ttu     | 1147  | 2,60E-150 | TRITD5Bv1G0067<br>90.1 | TRITD5Bv1G006790     | Chromosome 5B:<br>17,326,775-<br>17,328,203 forward strand     | Monocots<br>(commelinids) | Poales | Solyc03g031<br>860.2.1 |
| <i>Triticum turgidum</i>    | Ttu     | 1142  | 1,30E-149 | TRITD5Av1G0083<br>10.1 | TRITD5Av1G008310     | Chromosome 5A:<br>17,616,395-<br>17,617,884 reverse strand     | Monocots<br>(commelinids) | Poales | Solyc03g031<br>860.2.1 |
| <i>Triticum turgidum</i>    | Ttu     | 1126  | 2,10E-147 | TRITD5Bv1G0066<br>80.1 | TRITD5Bv1G006680     | Chromosome 5B:<br>17,026,598-<br>17,106,302 reverse strand.    | Monocots<br>(commelinids) | Poales | Solyc03g031<br>860.2.1 |
| <i>Triticum urartu</i>      | Tur     | 1079  | 9,50E-142 | TRIUR3_33626-<br>T1    | TRIUR3_33626         | SuperContig scaffold269090:<br>29,367-31,794 reverse strand    | Monocots<br>(commelinids) | Poales | Solyc03g031<br>860.2.1 |
| <i>Triticum urartu</i>      | Tur     | 731   | 1,90E-93  | TRIUR3_13950-<br>T1    | TRIUR3_13950         | SuperContig scaffold52601:<br>21,221-22,002 reverse<br>strand. | Monocots<br>(commelinids) | Poales | Solyc03g031<br>860.2.1 |
| <i>Zea mays</i>             | Zma     | 563.5 | 0.0       | Zm00008a024386<br>_T01 | Zm00008a024386_T01   | chr06:81555811..81559359<br>forward                            | Monocots<br>(commelinids) | Poales | Solyc03g031<br>860.2.1 |
| <i>Zea mays</i>             | Zma     | 515.4 | 0.0       | Zm00008a032909<br>_T01 | Zm00008a032909_T01   | chr08:168204484..16820825<br>7 reverse                         | Monocots<br>(commelinids) | Poales | Solyc03g031<br>860.2.1 |

| Species                    | Acronym | Score | Evalue    | Transcript Name           | CDS Accession Number | Location   | Classification group   | Order        | Query              |
|----------------------------|---------|-------|-----------|---------------------------|----------------------|--|------------------------|--------------|--------------------|
| <i>Zea mays</i>            | Zma     | 335.9 | 6.4E-112  | Zm00008a028762_T01        | Zm00008a028762_T01   | chr07:146291552..146293434 forward                       | Monocots (commelinids) | Poales       | Solyc03g031860.2.1 |
| <i>Zea mays (Ensembl)</i>  | Zma     | 518.5 | 0.0       | GRMZM2G149317_T01         | GRMZM2G149317_T01    | 8:167823550..167826600 reverse                           | Monocots (commelinids) | Poales       | Solyc03g031860.2.1 |
| <i>Zea mays (Ensembl)</i>  | Zma     | 345.9 | 1.3E-117  | GRMZM2G300348_T01         | GRMZM2G300348_T01    | 6:82182364..82184345 forward                             | Monocots (commelinids) | Poales       | Solyc03g031860.2.1 |
| <i>Actinidia chinensis</i> | Ach     | 1555  | 0.0       | PSS00264                  | PSS00264             | Chromosome LG21: 12,933,111-12,937,550 reverse strand    | Eudicot (asterids)     | Ericales     | Solyc03g031860.2.1 |
| <i>Actinidia chinensis</i> | Ach     | 1553  | 0.0       | PSS30087                  | PSS30087             | Chromosome LG5: 3,897,808-3,901,724 forward strand       | Eudicot (asterids)     | Ericales     | Solyc03g031860.2.1 |
| <i>Actinidia chinensis</i> | Ach     | 894   | 5,30E-116 | PSR86897                  | PSR86897             | Chromosome LG28: 15,339,888-15,343,821 reverse strand    | Eudicot (asterids)     | Ericales     | Solyc03g031860.2.1 |
| <i>Aquilegia coerulea</i>  | Ace     | 570.9 | 0.0       | Aqcoe3G009300.1 (primary) | Aqcoe3G009300.1      | Chr_03:602263..605497 reverse                            | Eudicots               | Ranunculales | Solyc03g031860.2.1 |
| <i>Aquilegia coerulea</i>  | Ace     | 527.7 | 0.0       | Aqcoe1G178400.1 (primary) | Aqcoe1G178400.1      | Chr_01:10395407..10398959 forward                        | Eudicots               | Ranunculales | Solyc03g031860.2.1 |
| <i>Aquilegia coerulea</i>  | Ace     | 442.6 | 7.1E-153  | Aqcoe1G050500.1 (primary) | Aqcoe1G050500.1      | Chr_01:2555174..2556931 reverse                          | Eudicots               | Ranunculales | Solyc03g031860.2.1 |
| <i>Coffea canephora</i>    | Cca     | 1566  | 0.0       | CDP21283                  | CDP21283             | SuperContig scaffold_3092: 6,986-12,616 reverse strand   | Eudicots (asterids)    | Gentianales  | Solyc03g031860.2.1 |
| <i>Coffea canephora</i>    | Cca     | 1195  | 6,50E-158 | CDP08373                  | CDP08373             | Chromosome 8: 26,570,827-26,572,985 reverse strand       | Eudicots (asterids)    | Gentianales  | Solyc03g031860.2.1 |
| <i>Coffea canephora</i>    | Cca     | 1101  | 7,20E-145 | CDP17352                  | CDP17352             | Chromosome 1: 4,751,718-4,753,782 reverse strand         | Eudicots (asterids)    | Gentianales  | Solyc03g031860.2.1 |
| <i>Cynara cardunculus</i>  | Ccr     | 1581  | 0.0       | KVI08675                  | KVI08675             | SuperContig scaffold_374: 148,566-152,979 reverse strand | Eudicots (asterids)    | Asterales    | Solyc03g031860.2.1 |
| <i>Cynara cardunculus</i>  | Ccr     | 1126  | 2,60E-148 | KVH90844                  | KVH90844             | SuperContig scaffold_62: 345,600-347,490 reverse strand  | Eudicots (asterids)    | Asterales    | Solyc03g031860.2.1 |
| <i>Cynara cardunculus</i>  | Ccr     | 780   | 2,70E-100 | KVI03037                  | KVI03037             | SuperContig scaffold_2482: 24,347-27,848 reverse strand  | Eudicots (asterids)    | Asterales    | Solyc03g031860.2.1 |
| <i>Daucus carota</i>       | Dca     | 641.3 | 0.0       | DCAR_010057 (primary)     | DCAR_010057          | DCARv2_Chr3:14246823..14250604 reverse                   | Eudicots (asterids)    | Apiales      | Solyc03g031860.2.1 |

| Species                     | Acronym | Score | Evalue    | Transcript Name                 | CDS Accession Number | Location   | Classification group   | Order     | Query              |
|-----------------------------|---------|-------|-----------|---------------------------------|----------------------|--|------------------------|-----------|--------------------|
| <i>Daucus carota</i>        | Dca     | 530.0 | 0.0       | DCAR_023043<br>(primary)        | DCAR_023043          | DCARv2_Chr6:2377864..2379676 forward                         | Eudicots<br>(asterids) | Apiales   | Solyc03g031860.2.1 |
| <i>Daucus carota</i>        | Dca     | 447.2 | 6,00E-155 | DCAR_024333<br>(primary)        | DCAR_024333          | DCARv2_Chr7:12326481..12328432 forward                       | Eudicots<br>(asterids) | Apiales   | Solyc03g031860.2.1 |
| <i>Helianthus annuus</i>    | Han     | 392   | 6,40E-156 | PSY1-1 OTG04734                 | OTG04734             | Chromosome 12:<br>39,201,022-39,205,788 reverse strand       | Eudicots<br>(asterids) | Asterales | Solyc03g031860.2.1 |
| <i>Helianthus annuus</i>    | Han     | 378   | 2,60E-137 | PSY-1 OTG06350                  | OTG06350             | Chromosome 12:<br>159,042,358-159,047,933 reverse strand     | Eudicots<br>(asterids) | Asterales | Solyc03g031860.2.1 |
| <i>Helianthus annuus</i>    | Han     | 353   | 1,80E-95  | OTG35442                        | OTG35442             | Chromosome 2:<br>171,868,581-171,871,894 reverse strand      | Eudicots<br>(asterids) | Asterales | Solyc03g031860.2.1 |
| <i>Ipomoea triloba</i>      | Itr     | 393   | 3,50E-162 | itb03g05110.t1                  | itb03g05110          | Chromosome 3: 3,439,071-3,443,392 forward strand             | Eudicots<br>(asterids) | Solanales | Solyc03g031860.2.1 |
| <i>Ipomoea triloba</i>      | Itr     | 391   | 1,70E-136 | itb12g01910.t1                  | itb12g01910          | Chromosome 12: 1,291,564-1,295,742 forward strand            | Eudicots<br>(asterids) | Solanales | Solyc03g031860.2.1 |
| <i>Ipomoea triloba</i>      | Itr     | 327   | 3,80E-110 | itb14g11400.t1                  | itb14g11400          | Chromosome 14:<br>13,043,653-13,045,702 forward strand       | Eudicots<br>(asterids) | Solanales | Solyc03g031860.2.1 |
| <i>Mimulus guttatus</i>     | Mgu     | 646.7 | 0.0       | Migut.K00976.1<br>(primary)     | Migut.K00976.1       | scaffold_11:14010950..14014009 forward                       | Eudicots<br>(asterids) | Lamiales  | Solyc03g031860.2.1 |
| <i>Mimulus guttatus</i>     | Mgu     | 458.8 | 2.5E-159  | Migut.O00865.1<br>(primary)     | Migut.O00865.1       | scaffold_2956:1797..3477 forward                             | Eudicots<br>(asterids) | Lamiales  | Solyc03g031860.2.1 |
| <i>Mimulus guttatus</i>     | Mgu     | 458.0 | 5.4E-159  | Migut.D02541.1<br>(primary)     | Migut.D02541.1       | scaffold_4:20917941..20919586 reverse                        | Eudicots<br>(asterids) | Lamiales  | Solyc03g031860.2.1 |
| <i>Nicotiana attenuata</i>  | Nat     | 1627  | 0.0       | OIT35874                        | OIT35874             | SuperContig scaffold00503:<br>205,508-208,871 reverse strand | Eudicots<br>(asterids) | Solanales | Solyc03g031860.2.1 |
| <i>Nicotiana attenuata</i>  | Nat     | 1591  | 0.0       | OIT34597                        | OIT34597             | SuperContig scaffold00685:<br>31,867-35,812 reverse strand.  | Eudicots<br>(asterids) | Solanales | Solyc03g031860.2.1 |
| <i>Nicotiana attenuata</i>  | Nat     | 1132  | 4,30E-149 | OIT32024                        | OIT32024             | SuperContig scaffold01147:<br>16,867-20,125 reverse strand.  | Eudicots<br>(asterids) | Solanales | Solyc03g031860.2.1 |
| <i>Solanum lycopersicum</i> | Sly     | 852.4 | 0.0       | Solyc03g031860.2.1<br>(primary) | Solyc03g031860.2.1   | SL2.50ch03:4326134..4330127 forward                          | Eudicots<br>(asterids) | Solanales | Solyc03g031860.2.1 |

| Species                      | Acronym | Score | Evalue    | Transcript Name                       | CDS Accession Number        | Location  | Classification group | Order        | Query                     |
|------------------------------|---------|-------|-----------|---------------------------------------|-----------------------------|---|----------------------|--------------|---------------------------|
| <i>Solanum lycopersicum</i>  | Sly     | 682.6 | 0.0       | <i>Solyc02g081330.2.1 (primary)</i>   | <i>Solyc02g081330.2.1</i>   | <i>SL2.50ch02:45335358..45339157 forward</i>                | Eudicots (asterids)  | Solanales    | <i>Solyc03g031860.2.1</i> |
| <i>Solanum lycopersicum</i>  | Sly     | 449.5 | 8.7E-156  | <i>Solyc01g005940.2.1 (primary)</i>   | <i>Solyc01g005940.2.1</i>   | <i>SL2.50ch01:613955..617183 forward</i>                    | Eudicots (asterids)  | Solanales    | <i>Solyc03g031860.2.1</i> |
| <i>Solanum tuberosum</i>     | Stu     | 826.2 | 0.0       | <i>PGSC0003DMT400061846 (primary)</i> | <i>PGSC0003DMT400061846</i> | <i>ST4.03ch03:2742065..2744858 forward</i>                  | Eudicots (asterids)  | Solanales    | <i>Solyc03g031860.2.1</i> |
| <i>Solanum tuberosum</i>     | Stu     | 778.5 | 0.0       | <i>PGSC0003DMT400061845 (primary)</i> | <i>GSC0003DMT400061845</i>  | <i>ST4.03ch03:2742065..2744858 forward</i>                  | Eudicots (asterids)  | Solanales    | <i>Solyc03g031860.2.1</i> |
| <i>Linum usitatissimum</i>   | Lus     | 525.8 | 0.0       | <i>Lus10001416 (primary)</i>          | <i>Lus10001416</i>          | <i>scaffold85:30097..32075 reverse</i>                      | Eudicots (rosid)     | Malpighiales | <i>Solyc03g031860.2.1</i> |
| <i>Linum usitatissimum</i>   | Lus     | 509.2 | 7.6E-179  | <i>Lus10001050 (primary)</i>          | <i>Lus10001050</i>          | <i>scaffold964:24886..26882 reverse</i>                     | Eudicots (rosid)     | Malpighiales | <i>Solyc03g031860.2.1</i> |
| <i>Linum usitatissimum</i>   | Lus     | 476.9 | 1.8E-166  | <i>Lus10020729 (primary)</i>          | <i>Lus10020729</i>          | <i>scaffold303:421222..428724 reverse</i>                   | Eudicots (rosid)     | Malpighiales | <i>Solyc03g031860.2.1</i> |
| <i>Linum usitatissimum</i>   | Lus     | 478.8 | 1.2E-165  | <i>Lus10029809 (primary)</i>          | <i>Lus10029809</i>          | <i>scaffold416:121008..122994 reverse</i>                   | Eudicots (rosid)     | Malpighiales | <i>Solyc03g031860.2.1</i> |
| <i>Linum usitatissimum</i>   | Lus     | 445.7 | 4.5E-154  | <i>Lus10013753 (primary)</i>          | <i>Lus10013753</i>          | <i>scaffold1168:335239..337750 forward</i>                  | Eudicots (rosid)     | Malpighiales | <i>Solyc03g031860.2.1</i> |
| <i>Linum usitatissimum</i>   | Lus     | 438.7 | 3,00E-151 | <i>Lus10039186 (primary)</i>          | <i>Lus10039186</i>          | <i>scaffold34:2009013..2011210 reverse</i>                  | Eudicots (rosid)     | Malpighiales | <i>Solyc03g031860.2.1</i> |
| <i>Lupinus angustifolius</i> | Lan     | 471   | 4,10E-147 | <i>OIW22018</i>                       | <i>OIW22018</i>             | <i>SuperContig Scaffold_702:7,016-9,463 reverse strand.</i> | Eudicots (rosid)     | Fabales      | <i>Solyc03g031860.2.1</i> |
| <i>Lupinus angustifolius</i> | Lan     | 385   | 1,00E-121 | <i>OIW02629</i>                       | <i>OIW02629</i>             | <i>Chromosome LG11:2,451,597-2,454,165 forward strand</i>   | Eudicots (rosid)     | Fabales      | <i>Solyc03g031860.2.1</i> |
| <i>Lupinus angustifolius</i> | Lan     | 377   | 1,00E-120 | <i>OIW16120</i>                       | <i>OIW16120</i>             | <i>Chromosome LG02:21,937,526-21,941,060 reverse strand</i> | Eudicots (rosid)     | Fabales      | <i>Solyc03g031860.2.1</i> |
| <i>Malus domestica</i>       | Mdo     | 536.6 | 0.0       | <i>MDP0000237124 (primary)</i>        | <i>MDP0000237124</i>        | <i>MDC004033.136:2450..5320 reverse</i>                     | Eudicots (rosid)     | Rosales      | <i>Solyc03g031860.2.1</i> |
| <i>Malus domestica</i>       | Mdo     | 484.6 | 4.7E-169  | <i>MDP0000177623 (primary)</i>        | <i>MDP0000177623</i>        | <i>MDC008336.467:13749..16522 reverse</i>                   | Eudicots (rosid)     | Rosales      | <i>Solyc03g031860.2.1</i> |
| <i>Malus domestica</i>       | Mdo     | 446.0 | 5.5E-154  | <i>MDP0000151924 (primary)</i>        | <i>MDP0000151924</i>        | <i>MDC016098.147:8268..10540 forward</i>                    | Eudicots (rosid)     | Rosales      | <i>Solyc03g031860.2.1</i> |
| <i>Malus domestica</i>       | Mdo     | 360.5 | 6,00E-119 | <i>MDP0000261447 (primary)</i>        | <i>MDP0000261447</i>        | <i>MDC019810.234:891..3831 forward</i>                      | Eudicots (rosid)     | Rosales      | <i>Solyc03g031860.2.1</i> |



| Species                     | Acronym | Score | Evalue    | Transcript Name               | CDS Accession Number | Location                                | Classification group | Order        | Query              |
|-----------------------------|---------|-------|-----------|-------------------------------|----------------------|---|----------------------|--------------|--------------------|
| <i>Malus domestica</i>      | Mdo     | 360.5 | 6.5E-119  | MDP0000321586 (primary)       | MDP0000321586        | MDC019810.242:8443..11383 forward       | Eudicots (rosid)     | Rosales      | Solyc03g031860.2.1 |
| <i>Manihot esculenta</i>    | Mes     | 634.4 | 0.0       | Manes.01G12420 0.1 (primary)  | Manes.01G124200.1    | Chromosome01:24153420..24156720 forward | Eudicots (rosid)     | Malpighiales | Solyc03g031860.2.1 |
| <i>Manihot esculenta</i>    | Mes     | 612.8 | 0.0       | Manes.02G08170 0.1 (primary)  | Manes.02G081700.1    | Chromosome02:6091016..6093529 forward   | Eudicots (rosid)     | Malpighiales | Solyc03g031860.2.1 |
| <i>Manihot esculenta</i>    | Mes     | 452.6 | 9.8E-157  | Manes.03G08470 0.1 (primary)  | Manes.03G084700.1    | Chromosome03:13755566..13757622 forward | Eudicots (rosid)     | Malpighiales | Solyc03g031860.2.1 |
| <i>Medicago truncatula</i>  | Mtr     | 607.1 | 0.0       | Medtr5g076620.1 (primary)     | Medtr5g076620.1      | chr5:32685852..32690189 reverse         | Eudicots (rosid)     | Fabales      | Solyc03g031860.2.1 |
| <i>Medicago truncatula</i>  | Mtr     | 546.2 | 0.0       | Medtr3g450510.1 (primary)     | Medtr3g450510.1      | chr3:17379804..17382838 reverse         | Eudicots (rosid)     | Fabales      | Solyc03g031860.2.1 |
| <i>Medicago truncatula</i>  | Mtr     | 535.8 | 0.0       | Medtr5g090780.1 (primary)     | Medtr5g090780.1      | chr5:39516910..39526617 reverse         | Eudicots (rosid)     | Fabales      | Solyc03g031860.2.1 |
| <i>Medicago truncatula</i>  | Mtr     | 448.7 | 3.6E-155  | Medtr3g083630.1 (primary)     | Medtr3g083630.1      | chr3:37749162..37751789 forward         | Eudicots (rosid)     | Fabales      | Solyc03g031860.2.1 |
| <i>Arabidopsis halleri</i>  | Aha     | 602.8 | 0.0       | Araha.10007s001 2.1 (primary) | Araha.10007s0012.1   | Scaffold10007:28956..32226 reverse      | Eudicots (rosids)    | Brassicales  | Solyc03g031860.2.1 |
| <i>Arabidopsis lyrata</i>   | Aly     | 599.4 | 0.0       | AL6G28280.t1 (primary)        | AL6G28280.t1         | scaffold_6:7059473..7062737 reverse     | Eudicots (rosids)    | Brassicales  | Solyc03g031860.2.1 |
| <i>Arabidopsis thaliana</i> | Ath     | 604.4 | 0.0       | AT5G17230.1                   | AT5G17230.1          | Chr5:5659574..5662865 reverse           | Eudicots (rosids)    | Brassicales  | Solyc03g031860.2.1 |
| <i>Boechera stricta</i>     | Bsr     | 606.7 | 0.0       | Bostr.2618s0058.1 (primary)   | Bostr.2618s0058.1    | Scaffold2618:293687..296867 reverse     | Eudicots (rosids)    | Brassicales  | Solyc03g031860.2.1 |
| <i>Brassica napus</i>       | Brn     | 630   | 4,00E-179 | NM_001315554                  | NM_001315554         | Chr9 NC_027775.2 (44447856..44450852)   | Eudicots (rosids)    | Brassicales  | Solyc03g031860.2.1 |
| <i>Brassica oleracea</i>    | Bol     | 589.3 | 0.0       | Bol019820 (primary)           | Bol019820            | C09:32393730..32395844 forward          | Eudicots (rosids)    | Brassicales  | Solyc03g031860.2.1 |
| <i>Brassica oleracea</i>    | Bol     | 586.3 | 0.0       | Bol021326 (primary)           | Bol021326            | C02:4117261..4119269 reverse            | Eudicots (rosids)    | Brassicales  | Solyc03g031860.2.1 |
| <i>Brassica oleracea</i>    | Bol     | 582.4 | 0.0       | Bol034439 (primary)           | Bol034439            | C03:3362597..3364641 reverse            | Eudicots (rosids)    | Brassicales  | Solyc03g031860.2.1 |
| <i>Brassica rapa</i>        | Bra     | 589.0 | 0.0       | Brara.J01825.1 (primary)      | Brara.J01825.1       | A10:14948644..14951545 forward          | Eudicots (rosids)    | Brassicales  | Solyc03g031860.2.1 |
| <i>Brassica rapa</i>        | Bra     | 584.7 | 0.0       | Brara.B00699.1 (primary)      | Brara.B00699.1       | A02:3229295..3232410 reverse            | Eudicots (rosids)    | Brassicales  | Solyc03g031860.2.1 |

| Species                     | Acronym | Score | Evalue    | Transcript Name                          | CDS Accession Number         | Location  | Classification group | Order        | Query              |
|-----------------------------|---------|-------|-----------|--|------------------------------|---|----------------------|--------------|--------------------|
| <i>Brassica rapa</i>        | Bra     | 575.5 | 0.0       | Brara.C00758.1 (primary)                 | Brara.C00758.1               | A03:3462822..3465336 reverse                          | Eudicots (rosids)    | Brassicales  | Solyc03g031860.2.1 |
| <i>Capsella grandiflora</i> | Cgr     | 600.9 | 0.0       | Cagra.4849s0011.1 (primary)              | Cagra.4849s0011.1            | Scaffold4849:47602..50896 forward                     | Eudicots (rosids)    | Brassicales  | Solyc03g031860.2.1 |
| <i>Capsella rubella</i>     | Cru     | 601.7 | 0.0       | Carubv10001034m (primary)                | Carubv10001034m              | scaffold_6:5698892..570229 7 reverse                  | Eudicots (rosids)    | Brassicales  | Solyc03g031860.2.1 |
| <i>Carica papaya</i>        | Cpa     | 274.2 | 2.9E-90   | evm.model.superc contig_119.76 (primary) | evm.model.supercontig_119.76 | supercontig_119:492097..492902 forward                | Eudicots (rosids)    | Brassicales  | Solyc03g031860.2.1 |
| <i>Citrus clementina</i>    | Ccl     | 620.9 | 0.0       | Ciclev10011751m                          | Ciclev10011751m              | scaffold_6:21390477..21396087 reverse                 | Eudicots (rosids)    | Sapindales   | Solyc03g031860.2.1 |
| <i>Citrus clementina</i>    | Ccl     | 531.9 | 0.0       | Ciclev10011841m (primary)                | Ciclev10011841m              | scaffold_6:21390477..21396087 reverse                 | Eudicots (rosids)    | Sapindales   | Solyc03g031860.2.1 |
| <i>Citrus clementina</i>    | Ccl     | 443.0 | 4.1E-153  | Ciclev10018150m (primary)                | Ciclev10018150m              | scaffold_2:587065..588778 forward                     | Eudicots (rosids)    | Sapindales   | Solyc03g031860.2.1 |
| <i>Citrus clementina</i>    | Ccl     | 421.0 | 1.6E-144  | Ciclev10015582m (primary)                | Ciclev10015582m              | scaffold_2:4441285..444338 6 forward                  | Eudicots (rosids)    | Sapindales   | Solyc03g031860.2.1 |
| <i>Citrus clementina</i>    | Ccl     | 313.5 | 5,00E-105 | Ciclev10018272m (primary)                | Ciclev10018272m              | scaffold_2:593780..594691 forward                     | Eudicots (rosids)    | Sapindales   | Solyc03g031860.2.1 |
| <i>Citrus sinensis</i>      | Csi     | 623.6 | 0.0       | orange1.1g044623m (primary)              | orange1.1g044623m            | scaffold00091:64686..69575 reverse                    | Eudicots (rosids)    | Sapindales   | Solyc03g031860.2.1 |
| <i>Citrus sinensis</i>      | Csi     | 443.0 | 3.8E-153  | orange1.1g036368m (primary)              | orange1.1g036368m            | scaffold00043:537648..539344 reverse                  | Eudicots (rosids)    | Sapindales   | Solyc03g031860.2.1 |
| <i>Citrus sinensis</i>      | Csi     | 421.0 | 1.8E-144  | orange1.1g016696m (primary)              | orange1.1g016696m            | scaffold00043:507836..509918 reverse                  | Eudicots (rosids)    | Sapindales   | Solyc03g031860.2.1 |
| <i>Citrus sinensis</i>      | Csi     | 318.9 | 1.4E-106  | orange1.1g036976m (primary)              | orange1.1g036976m            | scaffold00043:531582..532841 reverse                  | Eudicots (rosids)    | Sapindales   | Solyc03g031860.2.1 |
| <i>Corchorus capsularis</i> | Ccp     | 1523  | 0.0       | OMO59822                                 | OMO59822                     | SuperContig contig13869:10,338-13,426 reverse strand  | Eudicots (rosids)    | Malvales     | Solyc03g031860.2.1 |
| <i>Corchorus capsularis</i> | Ccp     | 1305  | 3,40E-173 | OMP12065                                 | OMP12065                     | SuperContig contig00482:2,804-5,324 reverse strand    | Eudicots (rosids)    | Malvales     | Solyc03g031860.2.1 |
| <i>Corchorus capsularis</i> | Ccp     | 1134  | 1,80E-149 | OMO80986                                 | OMO80986                     | SuperContig contig10253:32,456-34,004 forward strand. | Eudicots (rosids)    | Malvales     | Solyc03g031860.2.1 |
| <i>Cucumis sativus</i>      | Csa     | 612.1 | 0.0       | Cucsa.173570.1 (primary)                 | Cucsa.173570.1               | scaffold01209:280607..283995 forward                  | Eudicots (rosids)    | Cucurbitales | Solyc03g031860.2.1 |

| Species                    | Acronym | Score | Evalue   | Transcript Name                          | CDS Accession Number           | Location                             | Classification group | Order        | Query                     |
|----------------------------|---------|-------|----------|--|--------------------------------|--------------------------------------|----------------------|--------------|---------------------------|
| <i>Cucumis sativus</i>     | Csa     | 538.5 | 0.0      | <i>Cucsa.179860.1 (primary)</i>          | <i>Cucsa.179860.1</i>          | scaffold01233:223487..227034 forward | Eudicots (rosids)    | Cucurbitales | <i>Solyc03g031860.2.1</i> |
| <i>Cucumis sativus</i>     | Csa     | 459.5 | 4.8E-161 | <i>Cucsa.153210.1 (primary)</i>          | <i>Cucsa.153210.1</i>          | scaffold01124:412600..414885 forward | Eudicots (rosids)    | Cucurbitales | <i>Solyc03g031860.2.1</i> |
| <i>Eucalyptus grandis</i>  | Egr     | 597.4 | 0.0      | <i>Eucgr.F02913.1 (primary)</i>          | <i>Eucgr.F02913.1</i>          | Chr06:41294911..41299376 forward     | Eudicots (rosids)    | Myrtales     | <i>Solyc03g031860.2.1</i> |
| <i>Eucalyptus grandis</i>  | Egr     | 532.3 | 0.0      | <i>Eucgr.A02030.1 (primary)</i>          | <i>Eucgr.A02030.1</i>          | Chr01:35731243..35734193 forward     | Eudicots (rosids)    | Myrtales     | <i>Solyc03g031860.2.1</i> |
| <i>Eucalyptus grandis</i>  | Egr     | 527.3 | 0.0      | <i>Eucgr.F02914.1 (primary)</i>          | <i>Eucgr.F02914.1</i>          | hr06:41301565..41304622 forward      | Eudicots (rosids)    | Myrtales     | <i>Solyc03g031860.2.1</i> |
| <i>Eucalyptus grandis</i>  | Egr     | 455.3 | 1.7E-158 | <i>Eucgr.B03619.1 (primary)</i>          | <i>Eucgr.B03619.1</i>          | Chr02:55924946..55927040 forward     | Eudicots (rosids)    | Myrtales     | <i>Solyc03g031860.2.1</i> |
| <i>Eutrema salsugineum</i> | Esa     | 593.2 | 0.0      | <i>Thhalv10013646m</i>                   | <i>Thhalv10013646m</i>         | scaffold_2:5787369..5790424 reverse  | Eudicots (rosids)    | Brassicales  | <i>Solyc03g031860.2.1</i> |
| <i>Eutrema salsugineum</i> | Esa     | 585.9 | 0.0      | <i>Thhalv10013608m (primary)</i>         | <i>Thhalv10013608m</i>         | scaffold_2:5787369..5790790 reverse  | Eudicots (rosids)    | Brassicales  | <i>Solyc03g031860.2.1</i> |
| <i>Fragaria vesca</i>      | Fve     | 583.2 | 0.0      | <i>mrna31674.1-v1.0-hybrid (primary)</i> | <i>mrna31674.1-v1.0-hybrid</i> | LG1:10143441..10147256 reverse       | Eudicots (rosids)    | Rosales      | <i>Solyc03g031860.2.1</i> |
| <i>Fragaria vesca</i>      | Fve     | 548.9 | 0.0      | <i>mrna28765.1-v1.0-hybrid (primary)</i> | <i>mrna28765.1-v1.0-hybrid</i> | LG6:30207289..30209752 forward       | Eudicots (rosids)    | Rosales      | <i>Solyc03g031860.2.1</i> |
| <i>Fragaria vesca</i>      | Fve     | 446.8 | 7.4E-155 | <i>mrna24795.1-v1.0-hybrid (primary)</i> | <i>mrna24795.1-v1.0-hybrid</i> | LG3:28382548..28384477 reverse       | Eudicots (rosids)    | Rosales      | <i>Solyc03g031860.2.1</i> |
| <i>Glycine max</i>         | Gma     | 612.5 | 0.0      | <i>Glyma.02G240200.1 (primary)</i>       | <i>Glyma.02G240200.1</i>       | Chr02:42872399..42878147 reverse     | Eudicots (rosids)    | Fabales      | <i>Solyc03g031860.2.1</i> |
| <i>Glycine max</i>         | Gma     | 552.7 | 0.0      | <i>Glyma.14G209700.1 (primary)</i>       | <i>Glyma.14G209700.1</i>       | Chr14:47496019..47500526 reverse     | Eudicots (rosids)    | Fabales      | <i>Solyc03g031860.2.1</i> |
| <i>Glycine max</i>         | Gma     | 548.9 | 0.0      | <i>Glyma.18G111900.1 (primary)</i>       | <i>Glyma.18G111900.1</i>       | Chr18:13308532..13312028 forward     | Eudicots (rosids)    | Fabales      | <i>Solyc03g031860.2.1</i> |
| <i>Glycine max</i>         | Gma     | 547.7 | 0.0      | <i>Glyma.08G306200.1 (primary)</i>       | <i>Glyma.08G306200.1</i>       | Chr08:42422270..42425862 reverse     | Eudicots (rosids)    | Fabales      | <i>Solyc03g031860.2.1</i> |
| <i>Glycine max</i>         | Gma     | 547.4 | 0.0      | <i>Glyma.14G031200.1 (primary)</i>       | <i>Glyma.14G031200.1</i>       | Chr14:2263622..2266628 forward       | Eudicots (rosids)    | Fabales      | <i>Solyc03g031860.2.1</i> |
| <i>Glycine max</i>         | Gma     | 543.5 | 0.0      | <i>Glyma.02G283400.1 (primary)</i>       | <i>Glyma.02G283400.1</i>       | Chr02:46520816..46523824 reverse     | Eudicots (rosids)    | Fabales      | <i>Solyc03g031860.2.1</i> |

| Species                      | Acronym | Score | Evalue    | Transcript Name                      | CDS Accession Number      | Location                                    | Classification group | Order        | Query                     |
|------------------------------|---------|-------|-----------|--------------------------------------|---------------------------|---|----------------------|--------------|---------------------------|
| <i>Glycine max</i>           | Gma     | 445.3 | 1.2E-153  | <i>Glyma.18G00060 0.1 (primary)</i>  | <i>Glyma.18G000600.1</i>  | <i>Chr18:99110..101506 forward</i>          | Eudicots (rosids)    | Fabales      | <i>Solyc03g031860.2.1</i> |
| <i>Glycine max</i>           | Gma     | 386.7 | 6.9E-131  | <i>Glyma.11G25640 0.1 (primary)</i>  | <i>Glyma.11G256400.1</i>  | <i>Chr11:34614957..34616879 reverse</i>     | Eudicots (rosids)    | Fabales      | <i>Solyc03g031860.2.1</i> |
| <i>Gossypium raimondii</i>   | Gra     | 579.3 | 0.0       | <i>Gorai.001G08370 0.1 (primary)</i> | <i>Gorai.001G083700.1</i> | <i>Chr01:8837490..8839782 reverse</i>       | Eudicots (rosids)    | Malvales     | <i>Solyc03g031860.2.1</i> |
| <i>Gossypium raimondii</i>   | Gra     | 547.0 | 0.0       | <i>Gorai.006G00940 0.1 (primary)</i> | <i>Gorai.006G009400.1</i> | <i>Chr06:2095293..2098359 forward</i>       | Eudicots (rosids)    | Malvales     | <i>Solyc03g031860.2.1</i> |
| <i>Gossypium raimondii</i>   | Gra     | 473.0 | 4.7E-165  | <i>Gorai.012G03910 0.1 (primary)</i> | <i>Gorai.012G039100.1</i> | <i>Chr12:4858435..4862016 forward</i>       | Eudicots (rosids)    | Malvales     | <i>Solyc03g031860.2.1</i> |
| <i>Gossypium raimondii</i>   | Gra     | 462.2 | 2.1E-160  | <i>Gorai.010G12690 0.1 (primary)</i> | <i>Gorai.010G126900.1</i> | <i>Chr10:26981829..26983602 forward</i>     | Eudicots (rosids)    | Malvales     | <i>Solyc03g031860.2.1</i> |
| <i>Kalanchoe fedtschenko</i> | Kfe     | 536.6 | 0.0       | <i>Kaladp0038s0121.1 (primary)</i>   | <i>Kaladp0038s0121.1</i>  | <i>Scaffold_38:972031..974522 reverse</i>   | Eudicots (rosids)    | Saxifragales | <i>Solyc03g031860.2.1</i> |
| <i>Kalanchoe fedtschenko</i> | Kfe     | 469.5 | 1.8E-163  | <i>Kaladp0037s0246.1 (primary)</i>   | <i>Kaladp0037s0246.1</i>  | <i>Scaffold_37:1750094..1751770 forward</i> | Eudicots (rosids)    | Saxifragales | <i>Solyc03g031860.2.1</i> |
| <i>Kalanchoe fedtschenko</i> | Kfe     | 330.5 | 9.2E-112  | <i>Kaladp0673s0002.1 (primary)</i>   | <i>Kaladp0673s0002.1</i>  | <i>Scaffold_673:4911..5844 reverse</i>      | Eudicots (rosids)    | Saxifragales | <i>Solyc03g031860.2.1</i> |
| <i>Kalanchoe laxiflora</i>   | Kla     | 545.4 | 0.0       | <i>Kalax.0456s0024.1 (primary)</i>   | <i>Kalax.0456s0024.1</i>  | <i>scaffold_456:221357..224086 forward</i>  | Eudicots (rosids)    | Saxifragales | <i>Solyc03g031860.2.1</i> |
| <i>Kalanchoe laxiflora</i>   | Kla     | 542.0 | 0.0       | <i>Kalax.0207s0024.1 (primary)</i>   | <i>Kalax.0207s0024.1</i>  | <i>scaffold_207:338827..341588 reverse</i>  | Eudicots (rosids)    | Saxifragales | <i>Solyc03g031860.2.1</i> |
| <i>Kalanchoe laxiflora</i>   | Kla     | 538.5 | 0.0       | <i>Kalax.0551s0002.1 (primary)</i>   | <i>Kalax.0551s0002.1</i>  | <i>scaffold_551:16039..18637 reverse</i>    | Eudicots (rosids)    | Saxifragales | <i>Solyc03g031860.2.1</i> |
| <i>Kalanchoe laxiflora</i>   | Kla     | 533.5 | 0.0       | <i>Kalax.0033s0007.1 (primary)</i>   | <i>Kalax.0033s0007.1</i>  | <i>scaffold_33:58871..61590 reverse</i>     | Eudicots (rosids)    | Saxifragales | <i>Solyc03g031860.2.1</i> |
| <i>Kalanchoe laxiflora</i>   | Kla     | 468.8 | 6,00E-163 | <i>Kalax.0026s0034.1 (primary)</i>   | <i>Kalax.0026s0034.1</i>  | <i>scaffold_26:332064..333638 forward</i>   | Eudicots (rosids)    | Saxifragales | <i>Solyc03g031860.2.1</i> |
| <i>Kalanchoe laxiflora</i>   | Kla     | 468.0 | 1.2E-162  | <i>Kalax.1101s0008.1 (primary)</i>   | <i>Kalax.1101s0008.1</i>  | <i>scaffold_1101:71236..72950 forward</i>   | Eudicots (rosids)    | Saxifragales | <i>Solyc03g031860.2.1</i> |
| <i>Phaseolus vulgaris</i>    | Pvu     | 601.3 | 0.0       | <i>Phvul.008G24150 0.1 (primary)</i> | <i>Phvul.008G241500.1</i> | <i>Chr08:59009458..59014705 forward</i>     | Eudicots (rosids)    | Fabales      | <i>Solyc03g031860.2.1</i> |
| <i>Phaseolus vulgaris</i>    | Pvu     | 553.9 | 0.0       | <i>Phvul.006G02410 0.1 (primary)</i> | <i>Phvul.006G024100.1</i> | <i>Chr06:9727535..9730509 reverse</i>       | Eudicots (rosids)    | Fabales      | <i>Solyc03g031860.2.1</i> |
| <i>Phaseolus vulgaris</i>    | Pvu     | 543.9 | 0.0       | <i>Phvul.008G19580 0.1 (primary)</i> | <i>Phvul.008G195800.1</i> | <i>Chr08:54004623..54007080 forward</i>     | Eudicots (rosids)    | Fabales      | <i>Solyc03g031860.2.1</i> |

| Species                    | Acronym | Score | Evalue    | Transcript Name                | CDS Accession Number | Location   | Classification group | Order        | Query              |
|----------------------------|---------|-------|-----------|--------------------------------|----------------------|--|----------------------|--------------|--------------------|
| <i>Phaseolus vulgaris</i>  | Pvu     | 446.0 | 2.7E-154  | Phvul.001G26860.0.1 (primary)  | Phvul.001G268600.1   | Chr01:51323835..51325905 reverse                             | Eudicots (rosids)    | Fabales      | Solyc03g031860.2.1 |
| <i>Populus trichocarpa</i> | Ptr     | 533.1 | 0.0       | Potri.005G205800.1 (primary)   | Potri.005G205800.1   | Chr05:22042708..22046398 forward                             | Eudicots (rosids)    | Malpighiales | Solyc03g031860.2.1 |
| <i>Populus trichocarpa</i> | Ptr     | 531.2 | 0.0       | Potri.002G056800.1 (primary)   | Potri.002G056800.1   | Chr02:3799091..3802364 reverse                               | Eudicots (rosids)    | Malpighiales | Solyc03g031860.2.1 |
| <i>Populus trichocarpa</i> | Ptr     | 516.5 | 0.0       | Potri.004G081500.1 (primary)   | Potri.004G081500.1   | Chr04:6717614..6720756 forward                               | Eudicots (rosids)    | Malpighiales | Solyc03g031860.2.1 |
| <i>Populus trichocarpa</i> | Ptr     | 498.0 | 9.9E-176  | Potri.017G138900.1 (primary)   | Potri.017G138900.1   | Chr17:14712482..14716973 reverse                             | Eudicots (rosids)    | Malpighiales | Solyc03g031860.2.1 |
| <i>Populus trichocarpa</i> | Ptr     | 452.6 | 1.2E-156  | Potri.001G007700.1 (primary)   | Potri.001G007700.1   | Chr01:518243..520451 forward                                 | Eudicots (rosids)    | Malpighiales | Solyc03g031860.2.1 |
| <i>Populus trichocarpa</i> | Ptr     | 424.1 | 1.7E-145  | Potri.003G218000.1 (primary)   | Potri.003G218000.1   | Chr03:21421621..21423998 reverse                             | Eudicots (rosids)    | Malpighiales | Solyc03g031860.2.1 |
| <i>Prunus avium</i>        | Pav     | 466   | 1,00E-143 | Pav_sc0001215.1_g280.1.mk:mrna | sc0001215            | SuperContig Pav_sc0001215.1.: 135,814-138,824 reverse strand | Eudicots (rosids)    | Rosales      | Solyc03g031860.2.1 |
| <i>Prunus avium</i>        | Pav     | 375   | 2,50E-164 | Pav_sc0001124.1_g480.1.mk:mrna | sc0001124            | SuperContig Pav_sc0001124.1.: 341,607-346,067 reverse strand | Eudicots (rosids)    | Rosales      | Solyc03g031860.2.1 |
| <i>Prunus avium</i>        | Pav     | 335   | 1,90E-99  | Pav_sc0000909.1_g650.1.mk:mrna | sc0000909            | SuperContig Pav_sc0000909.1.: 406,876-408,851 reverse strand | Eudicots (rosids)    | Rosales      | Solyc03g031860.2.1 |
| <i>Prunus persica</i>      | Ppe     | 631.7 | 0.0       | Prupe.3G013200.1 (primary)     | Prupe.3G013200.1     | Pp03:938428..942844 forward                                  | Eudicots (rosids)    | Rosales      | Solyc03g031860.2.1 |
| <i>Prunus persica</i>      | Ppe     | 553.5 | 0.0       | Prupe.3G178500.1 (primary)     | Prupe.3G178500.1     | Pp03:19498687..19501428 forward                              | Eudicots (rosids)    | Rosales      | Solyc03g031860.2.1 |
| <i>Prunus persica</i>      | Ppe     | 438.7 | 3,00E-151 | Prupe.6G006800.1 (primary)     | Prupe.6G006800.1     | Pp06:572052..574223 forward                                  | Eudicots (rosids)    | Rosales      | Solyc03g031860.2.1 |
| <i>Ricinus communis</i>    | Rco     | 617.8 | 0.0       | 28611.m000105 (primary)        | 28611.m000105        | 28611:72961..77067 reverse                                   | Eudicots (rosids)    | Malpighiales | Solyc03g031860.2.1 |
| <i>Ricinus communis</i>    | Rco     | 451.4 | 1.4E-156  | 29835.m000639 (primary)        | 29835.m000639        | 29835:165737..167782 forward                                 | Eudicots (rosids)    | Malpighiales | Solyc03g031860.2.1 |
| <i>Ricinus communis</i>    | Rco     | 398.7 | 3.9E-136  | 29835.m000640 (primary)        | 29835.m000640        | 29835:168336..171416 reverse                                 | Eudicots (rosids)    | Malpighiales | Solyc03g031860.2.1 |
| <i>Salix purpurea</i>      | Spu     | 618.6 | 0.0       | SapurV1A.0549s0100.1 (primary) | SapurV1A.0549s0100.1 | chr17:16798169..16802345 reverse                             | Eudicots (rosids)    | Malpighiales | Solyc03g031860.2.1 |

| Species                   | Acronym    | Score | Evalue    | Transcript Name                           | CDS Accession Number            | Location  | Classification group     | Order          | Query                     |
|---------------------------|------------|-------|-----------|---|---------------------------------|---|--------------------------|----------------|---------------------------|
| <i>Salix purpurea</i>     | <i>Spu</i> | 538.5 | 0.0       | <i>SapurV1A.1979s0010.1 (primary)</i>     | <i>apurV1A.1979s0010.1</i>      | <i>chr05:17477652..17480791 forward</i>                         | Eudicots (rosids)        | Malpighiales   | <i>Solyc03g031860.2.1</i> |
| <i>Salix purpurea</i>     | <i>Spu</i> | 537.0 | 0.0       | <i>SapurV1A.0076s0100.1 (primary)</i>     | <i>SapurV1A.0076s0100.1</i>     | <i>chr05:17594349..17597440 forward</i>                         | Eudicots (rosids)        | Malpighiales   | <i>Solyc03g031860.2.1</i> |
| <i>Salix purpurea</i>     | <i>Spu</i> | 535.0 | 0.0       | <i>SapurV1A.4120s0010.1 (primary)</i>     | <i>SapurV1A.4120s0010.1</i>     | <i>Scaffold4120:6004..8854 forward</i>                          | Eudicots (rosids)        | Malpighiales   | <i>Solyc03g031860.2.1</i> |
| <i>Salix purpurea</i>     | <i>Spu</i> | 529.6 | 0.0       | <i>SapurV1A.0354s0270.1 (primary)</i>     | <i>SapurV1A.0354s0270.1</i>     | <i>chr15:13280059..13282909 reverse</i>                         | Eudicots (rosids)        | Malpighiales   | <i>Solyc03g031860.2.1</i> |
| <i>Salix purpurea</i>     | <i>Spu</i> | 405.2 | 4.4E-138  | <i>SapurV1A.0081s0270.1 (primary)</i>     | <i>SapurV1A.0081s0270.1</i>     | <i>chr03:16337996..16340689 reverse</i>                         | Eudicots (rosids)        | Malpighiales   | <i>Solyc03g031860.2.1</i> |
| <i>Theobroma cacao</i>    | <i>Tca</i> | 633.3 | 0.0       | <i>Thecc1EG017615t1 (primary)</i>         | <i>Thecc1EG017615t1</i>         | <i>scaffold_4:5316486..5321472 forward</i>                      | Eudicots (rosids)        | Malvales       | <i>Solyc03g031860.2.1</i> |
| <i>Theobroma cacao</i>    | <i>Tca</i> | 552.7 | 0.0       | <i>Thecc1EG001945t1 (primary)</i>         | <i>Thecc1EG001945t1</i>         | <i>scaffold_1:10439470..10442560 reverse</i>                    | Eudicots (rosids)        | Malvales       | <i>Solyc03g031860.2.1</i> |
| <i>Theobroma cacao</i>    | <i>Tca</i> | 459.5 | 1.1E-159  | <i>Thecc1EG040196t1 (primary)</i>         | <i>Thecc1EG040196t1</i>         | <i>scaffold_9:27850549..27853174 forward</i>                    | Eudicots (rosids)        | Malvales       | <i>Solyc03g031860.2.1</i> |
| <i>Vigna radiata</i>      | <i>Vra</i> | 476   | 9,80E-136 | <i>Vradi01g13040.1</i>                    | <i>Vradi01g13040.1</i>          | <i>Chromosome 1: 29,983,650-29,986,312 forward strand</i>       | Eudicots (rosids)        | Fabales        | <i>Solyc03g031860.2.1</i> |
| <i>Vigna radiata</i>      | <i>Vra</i> | 459   | 2,10E-129 | <i>Vradi06g02420.1</i>                    | <i>Vradi06g02420.1</i>          | <i>Chromosome 6: 2,396,136-2,398,470 forward strand.</i>        | Eudicots (rosids)        | Fabales        | <i>Solyc03g031860.2.1</i> |
| <i>Vigna radiata</i>      | <i>Vra</i> | 379   | 1,30E-146 | <i>Vradi06g05990.1</i>                    | <i>Vradi06g05990.1</i>          | <i>Chromosome 6: 7,578,171-7,583,722 forward strand.</i>        | Eudicots (rosids)        | Fabales        | <i>Solyc03g031860.2.1</i> |
| <i>Vigna radiata</i>      | <i>Vra</i> | 334   | 4,30E-102 | <i>Vradi0246s00050.1</i>                  | <i>Vradi0246s00050.1</i>        | <i>Super-Contig scaffold_246:120,684-123,023 forward strand</i> | Eudicots (rosids)        | Fabales        | <i>Solyc03g031860.2.1</i> |
| <i>Vitis vinifera</i>     | <i>Vvi</i> | 664.8 | 0.0       | <i>GSVIVT01035255001</i>                  | <i>GSVIVT01035255001</i>        | <i>chr4:11494435..11499618 forward</i>                          | Eudicots (rosids)        | Vitales        | <i>Solyc03g031860.2.1</i> |
| <i>Vitis vinifera</i>     | <i>Vvi</i> | 510.4 | 0.0       | <i>GSVIVT01020828001</i>                  | <i>GSVIVT01020828001</i>        | <i>chr12:1467463..1470527 forward</i>                           | Eudicots (rosids)        | Vitales        | <i>Solyc03g031860.2.1</i> |
| <i>Vitis vinifera</i>     | <i>Vvi</i> | 451.8 | 3,00E-157 | <i>GSVIVT01025421001</i>                  | <i>GSVIVT01025421001</i>        | <i>chr6:935380..940685 forward</i>                              | Eudicots (rosids)        | Vitales        | <i>Solyc03g031860.2.1</i> |
| <i>Beta vulgaris</i>      | <i>Bvu</i> | 392   | 7,00E-143 | <i>KMT13325</i>                           | <i>KMT13325</i>                 | <i>Chromosome 4: 20,504,431-20,508,295 reverse strand</i>       | Eudicots (superasterids) | Caryophyllales | <i>Solyc03g031860.2.1</i> |
| <i>Trifolium pratense</i> | <i>Tpr</i> | 602.8 | 0.0       | <i>Tp57577_TGAC_v2_mRNA5500 (primary)</i> | <i>Tp57577_TGAC_v2_mRNA5500</i> | <i>Tp57577_TGAC_v2_LG2:23973554..23978020 forward</i>           | Eudicots(rosids)         | Fabales        | <i>Solyc03g031860.2.1</i> |

| Species                   | Acronym    | Score | Evalue   | Transcript Name                               | CDS Accession Number             | Location   | Classification group    | Order          | Query                     |
|---------------------------|------------|-------|----------|---|----------------------------------|--|-------------------------|----------------|---------------------------|
| <i>Trifolium pratense</i> | <i>Tpr</i> | 537.7 | 0.0      | <i>Tp57577_TGAC_v2_mRNA26125</i><br>(primary) | <i>Tp57577_TGAC_v2_mRNA26125</i> | <i>Tp57577_TGAC_v2_LG5:14102402..14106056 forward</i>  | <i>Eudicots(rosids)</i> | <i>Fabales</i> | <i>Solyc03g031860.2.1</i> |
| <i>Trifolium pratense</i> | <i>Tpr</i> | 460.3 | 5.8E-160 | <i>Tp57577_TGAC_v2_mRNA19990</i><br>(primary) | <i>Tp57577_TGAC_v2_mRNA19990</i> | <i>Tp57577_TGAC_v2_scaf_333:243896..246365 forward</i> | <i>Eudicots(rosids)</i> | <i>Fabales</i> | <i>Solyc03g031860.2.1</i> |
| <i>Trifolium pratense</i> | <i>Tpr</i> | 443,7 | 1.6E-152 | <i>Tp57577_TGAC_v2_mRNA9064</i><br>(primary)  | <i>Tp57577_TGAC_v2_mRNA9064</i>  | <i>Tp57577_TGAC_v2_scaf_512:4326..10060 forward</i>    | <i>Eudicots(rosids)</i> | <i>Fabales</i> | <i>Solyc03g031860.2.1</i> |