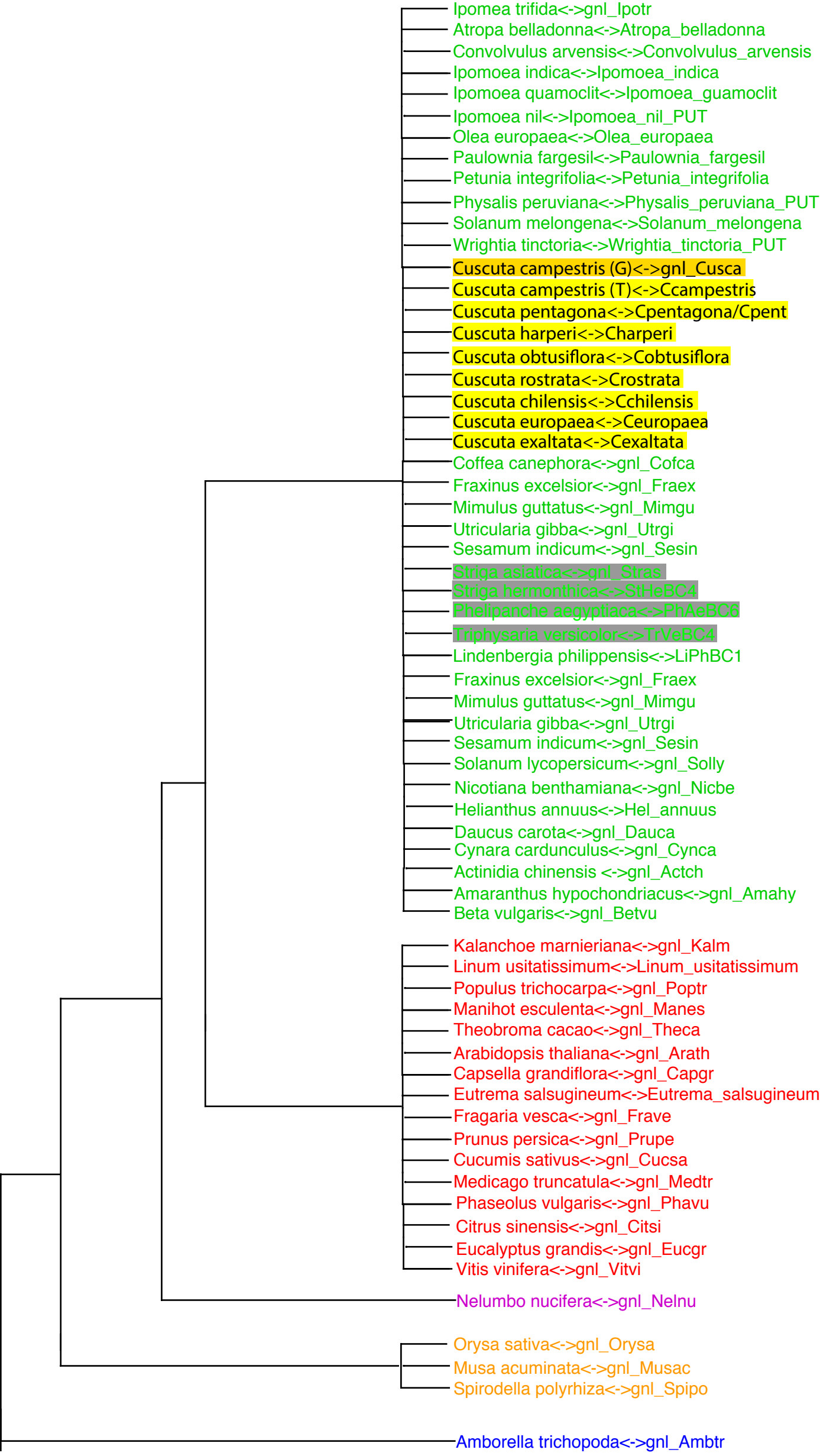

Ipomea trifida<->gnl_Ipotr
Atropa belladonna<->Atropa_belladonna
Convolvulus arvensis<->Convolvulus_arvensis
Ipomoea indica<->Ipomoea_indica
Ipomoea quamoclit<->Ipomoea_guamoclit
Ipomoea nil<->Ipomoea_nil_PUT
Olea europaea<->Olea_europaea
Paulownia fargesil<->Paulownia_fargesil
Petunia integrifolia<->Petunia_integrifolia
Physalis peruviana<->Physalis_peruviana_PUT
Solanum melongena<->Solanum_melongena
Wrightia tinctoria<->Wrightia_tinctoria_PUT
Cuscuta campestris (G)<->gnl_Cusca
Cuscuta campestris (T)<->Ccampestris
Cuscuta pentagona<->Cpentagona/Cpent
Cuscuta harperi<->Charperi
Cuscuta obtusiflora<->Cobtusiflora
Cuscuta rostrata<->Crostrata
Cuscuta chilensis<->Cchilensis
Cuscuta europaea<->Ceuropaea
Cuscuta exaltata<->Cexaltata
Coffea canephora<->gnl_Cofca
Fraxinus excelsior<->gnl_Fraex
Mimulus guttatus<->gnl_Mimgu
Utricularia gibba<->gnl_Utrgi
Sesamum indicum<->gnl_Sesin
Striga asiatica<->gnl_Stras
Striga hermonthica<->StHeBC4
Pholipanche aegyptiaca<->PhAeBC6
Triphysaria versicolor<->TrVeBC4
Lindenbergia philippensis<->LiPhBC1
Fraxinus excelsior<->gnl_Fraex
Mimulus guttatus<->gnl_Mimgu
Utricularia gibba<->gnl_Utrgi
Sesamum indicum<->gnl_Sesin
Solanum lycopersicum<->gnl_Solly
Nicotiana benthamiana<->gnl_Nicbe
Helianthus annuus<->Hel_annuus
Daucus carota<->gnl_Dauca
Cynara cardunculus<->gnl_Cynca
Actinidia chinensis <->gnl_Actch
Amaranthus hypochondriacus<->gnl_Amahy
Beta vulgaris<->gnl_Betvu
Kalanchoe marnieriana<->gnl_Kalm
Linum usitatissimum<->Linum_usitatissimum
Populus trichocarpa<->gnl_Poptr
Manihot esculenta<->gnl_Manes
Theobroma cacao<->gnl_Theca
Arabidopsis thaliana<->gnl_Arath
Capsella grandiflora<->gnl_Capgr
Eutrema salsugineum<->Eutrema_salsugineum
Fragaria vesca<->gnl_Frave
Prunus persica<->gnl_Prupe
Cucumis sativus<->gnl_Cucsa
Medicago truncatula<->gnl_Medtr
Phaseolus vulgaris<->gnl_Phavu
Citrus sinensis<->gnl_Citsi
Eucalyptus grandis<->gnl_Eucgr
Vitis vinifera<->gnl_Vitvi
Nelumbo nucifera<->gnl_Nelnu
Orysa sativa<->gnl_Orysa
Musa acuminata<->gnl_Musac
Spirodella polyrhiza<->gnl_Spipo
Amborella trichopoda<->gnl_Ambtr

Fig. S4.1_OrthoFinder3_suborthо0

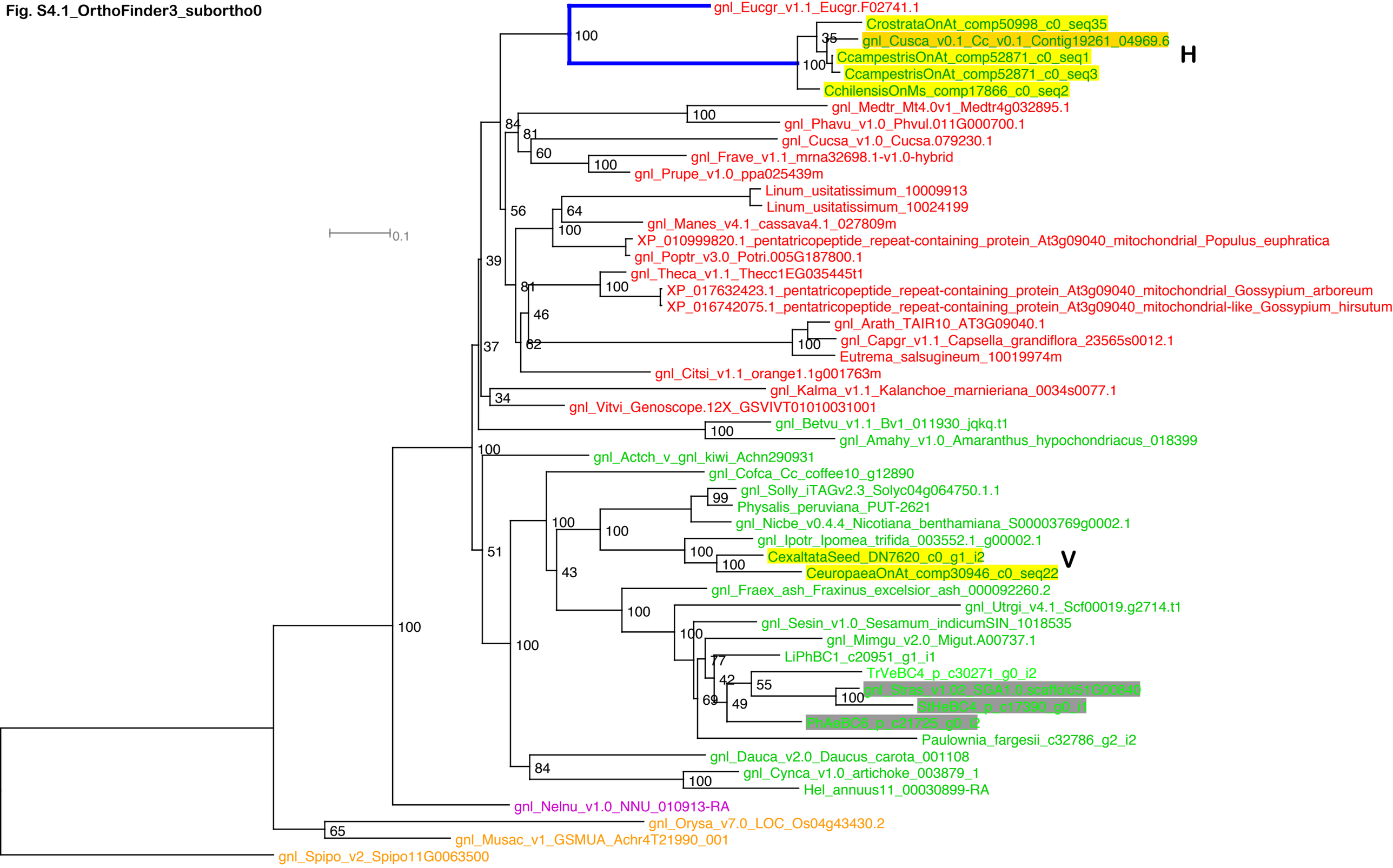
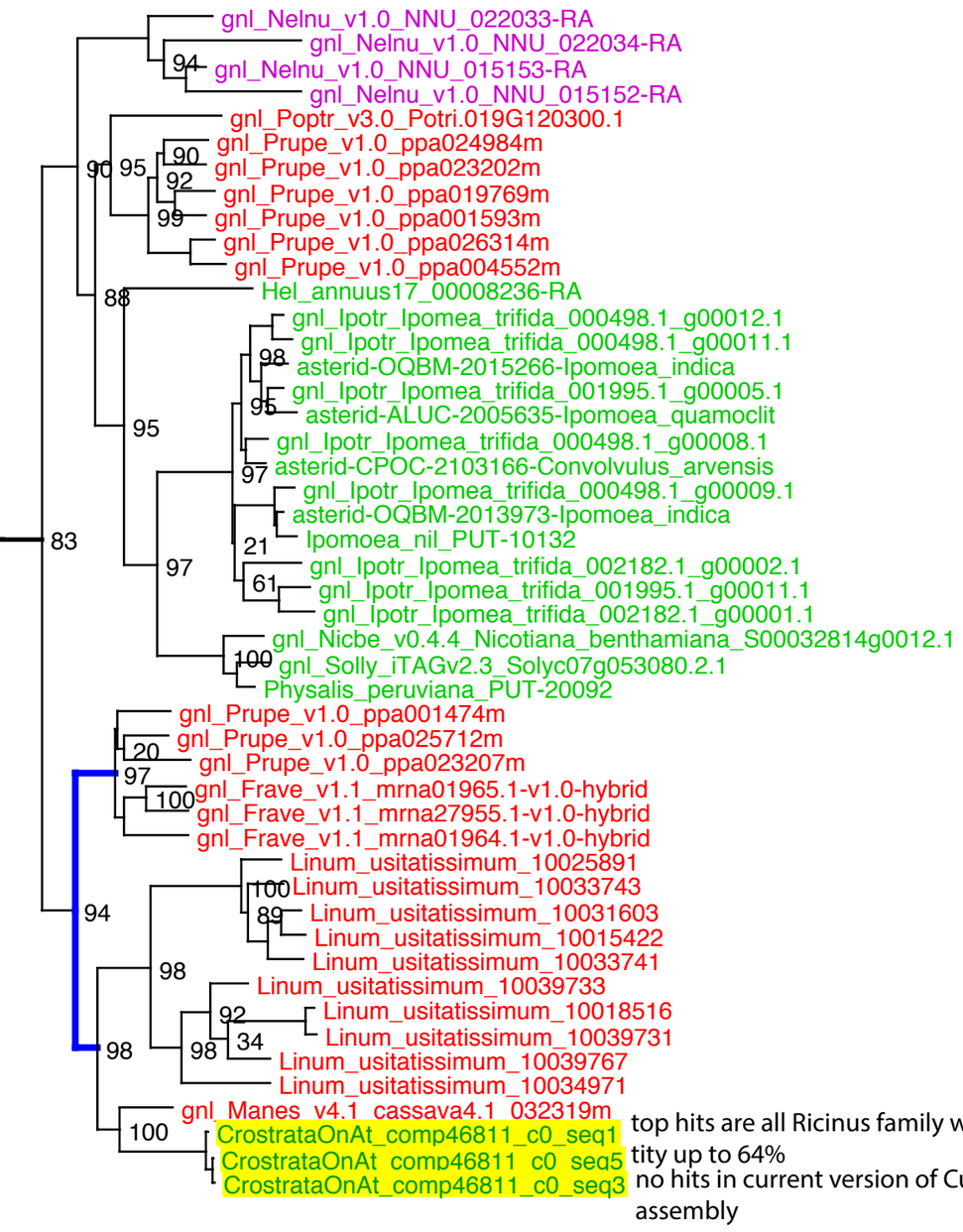


Fig. S4.2_OrthoFinder6_suborthol

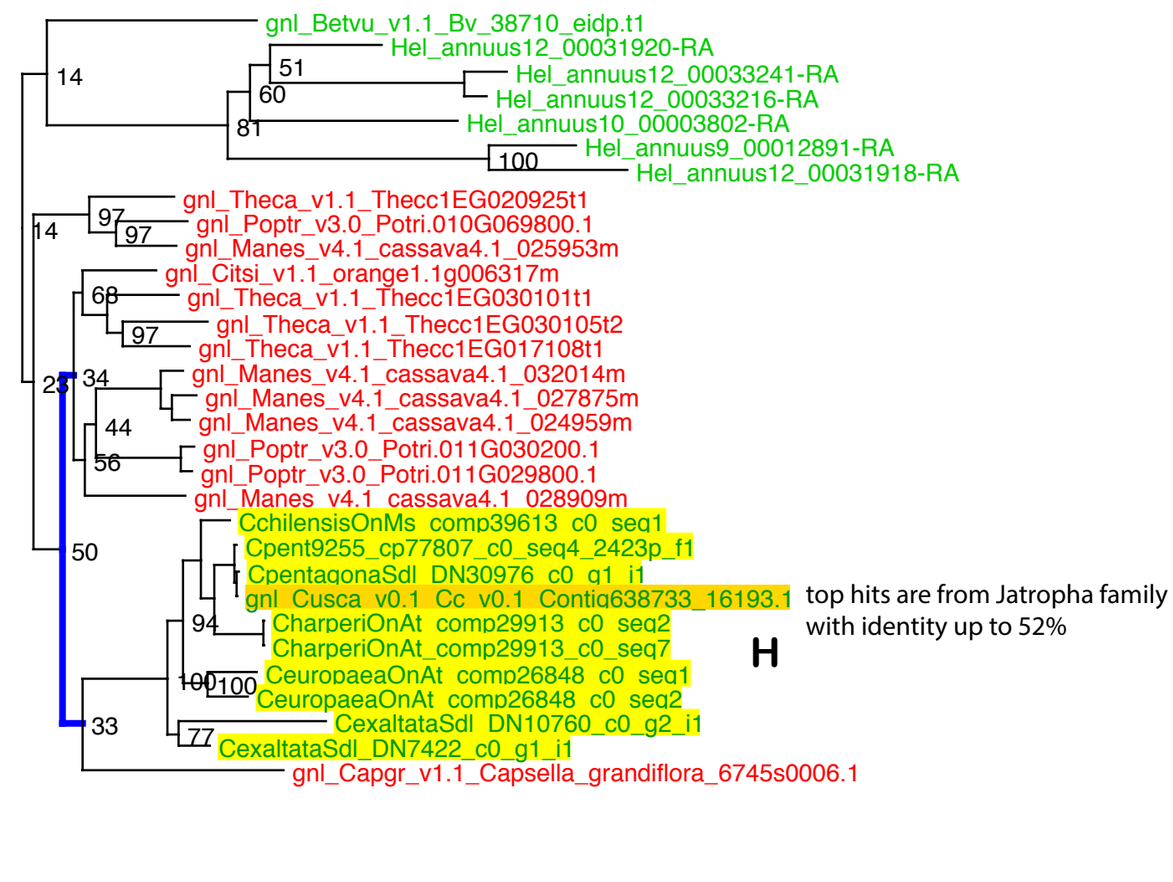
part1



top hits are all Ricinus family with identity up to 64%
no hits in current version of Cuscuta genome assembly

H

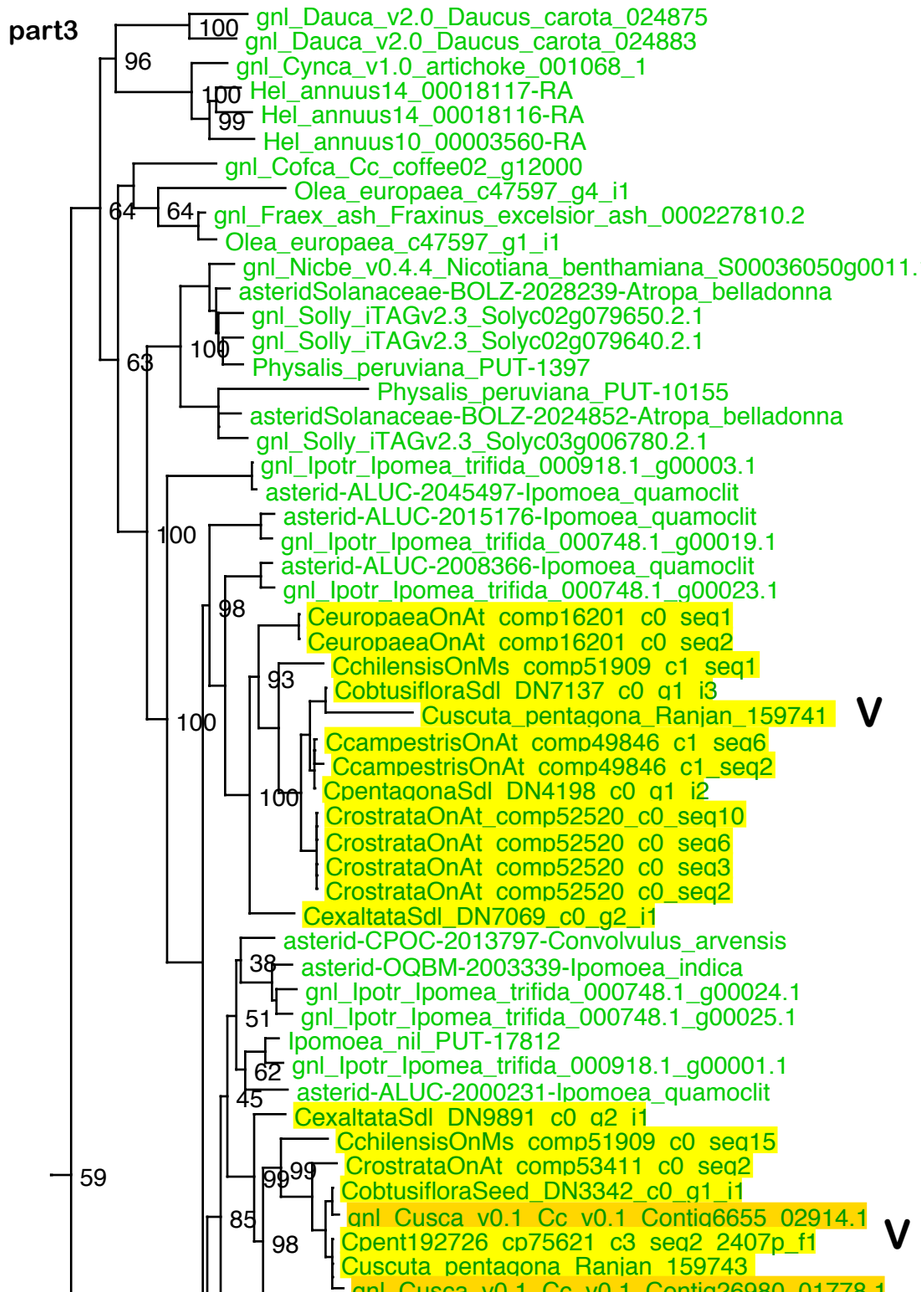
part2



top hits are from Jatropha family with identity up to 52%

H

part3



V

V

H

Fig. S4.3_OrthoFinder4_subortho20

Fig. S4.4_OrthoFinder6_subortho26

Fig. S13. Eukaryotes 13
Ancyromonadida
Malawimonadida
Metamonada
Discoba
Amoebozoa
Opisthokonta
Haptista
Cryptista
Archaeplastida
Rhizaria
Alveolata
Stramenopiles
Eukaryotes
Archaea
Bacteria
Viruses
Unclassified sequences
Outgroup
Tree scale: 1

Fig. 10.1 - Draft.newick
Root
Outgroup
Ingroup
Clade A
Clade B
Clade C
Clade D
Clade E
Clade F
Clade G
Clade H
Clade I
Clade J
Clade K
Clade L
Clade M
Clade N
Clade O
Clade P
Clade Q
Clade R
Clade S
Clade T
Clade U
Clade V
Clade W
Clade X
Clade Y
Clade Z
Clade AA
Clade AB
Clade AC
Clade AD
Clade AE
Clade AF
Clade AG
Clade AH
Clade AI
Clade AJ
Clade AK
Clade AL
Clade AM
Clade AN
Clade AO
Clade AP
Clade AQ
Clade AR
Clade AS
Clade AT
Clade AU
Clade AV
Clade AW
Clade AX
Clade AY
Clade AZ
Clade BA
Clade BB
Clade BC
Clade BD
Clade BE
Clade BF
Clade BG
Clade BH
Clade BI
Clade BJ
Clade BK
Clade BL
Clade BM
Clade BN
Clade BO
Clade BP
Clade BQ
Clade BR
Clade BS
Clade BT
Clade BU
Clade BV
Clade BW
Clade BX
Clade BY
Clade BZ
Clade CA
Clade CB
Clade CC
Clade CD
Clade CE
Clade CF
Clade CG
Clade CH
Clade CI
Clade CJ
Clade CK
Clade CL
Clade CM
Clade CN
Clade CO
Clade CP
Clade CQ
Clade CR
Clade CS
Clade CT
Clade CU
Clade CV
Clade CW
Clade CX
Clade CY
Clade CZ
Clade DA
Clade DB
Clade DC
Clade DD
Clade DE
Clade DF
Clade DG
Clade DH
Clade DI
Clade DJ
Clade DK
Clade DL
Clade DM
Clade DN
Clade DO
Clade DP
Clade DQ
Clade DR
Clade DS
Clade DT
Clade DU
Clade DV
Clade DW
Clade DX
Clade DY
Clade DZ
Clade EA
Clade EB
Clade EC
Clade ED
Clade EE
Clade EF
Clade EG
Clade EH
Clade EI
Clade EJ
Clade EK
Clade EL
Clade EM
Clade EN
Clade EO
Clade EP
Clade EQ
Clade ER
Clade ES
Clade ET
Clade EU
Clade EV
Clade EW
Clade EX
Clade EY
Clade EZ
Clade FA
Clade FB
Clade FC
Clade FD
Clade FE
Clade FF
Clade FG
Clade FH
Clade FI
Clade FJ
Clade FK
Clade FL
Clade FM
Clade FN
Clade FO
Clade FP
Clade FQ
Clade FR
Clade FS
Clade FT
Clade FU
Clade FV
Clade FW
Clade FX
Clade FY
Clade FZ
Clade GA
Clade GB
Clade GC
Clade GD
Clade GE
Clade GF
Clade GG
Clade GH
Clade GI
Clade GJ
Clade GK
Clade GL
Clade GM
Clade GN
Clade GO
Clade GP
Clade GQ
Clade GR
Clade GS
Clade GT
Clade GU
Clade GV
Clade GW
Clade GX
Clade GY
Clade GZ
Clade HA
Clade HB
Clade HC
Clade HD
Clade HE
Clade HF
Clade HG
Clade HH
Clade HI
Clade HJ
Clade HK
Clade HL
Clade HM
Clade HN
Clade HO
Clade HP
Clade HQ
Clade HR
Clade HS
Clade HT
Clade HU
Clade HV
Clade HW
Clade HX
Clade HY
Clade HZ
Clade IA
Clade IB
Clade IC
Clade ID
Clade IE
Clade IF
Clade IG
Clade IH
Clade II
Clade IJ
Clade IK
Clade IL
Clade IM
Clade IN
Clade IO
Clade IP
Clade IQ
Clade IR
Clade IS
Clade IT
Clade IU
Clade IV
Clade IW
Clade IX
Clade IY
Clade IZ
Clade JA
Clade JB
Clade JC
Clade JD
Clade JE
Clade JF
Clade JG
Clade JH
Clade JI
Clade JJ
Clade JK
Clade JL
Clade JM
Clade JN
Clade JO
Clade JP
Clade JQ
Clade JR
Clade JS
Clade JT
Clade JU
Clade JV
Clade JW
Clade JX
Clade JY
Clade JZ
Clade KA
Clade KB
Clade KC
Clade KD
Clade KE
Clade KF
Clade KG
Clade KH
Clade KI
Clade KJ
Clade KK
Clade KL
Clade KM
Clade KN
Clade KO
Clade KP
Clade KQ
Clade KR
Clade KS
Clade KT
Clade KU
Clade KV
Clade KW
Clade KX
Clade KY
Clade KZ
Clade LA
Clade LB
Clade LC
Clade LD
Clade LE
Clade LF
Clade LG
Clade LH
Clade LI
Clade LJ
Clade LK
Clade LL
Clade LM
Clade LN
Clade LO
Clade LP
Clade LQ
Clade LR
Clade LS
Clade LT
Clade LU
Clade LV
Clade LW
Clade LX
Clade LY
Clade LZ
Clade MA
Clade MB
Clade MC
Clade MD
Clade ME
Clade MF
Clade MG
Clade MH
Clade MI
Clade MJ
Clade MK
Clade ML
Clade MM
Clade MN
Clade MO
Clade MP
Clade MQ
Clade MR
Clade MS
Clade MT
Clade MU
Clade MV
Clade MW
Clade MX
Clade MY
Clade MZ
Clade NA
Clade NB
Clade NC
Clade ND
Clade NE
Clade NF
Clade NG
Clade NH
Clade NI
Clade NJ
Clade NK
Clade NL
Clade NM
Clade NN
Clade NO
Clade NP
Clade NQ
Clade NR
Clade NS
Clade NT
Clade NU
Clade NV
Clade NW
Clade NX
Clade NY
Clade NZ
Clade OA
Clade OB
Clade OC
Clade OD
Clade OE
Clade OF
Clade OG
Clade OH
Clade OI
Clade OJ
Clade OK
Clade OL
Clade OM
Clade ON
Clade OO
Clade OP
Clade OQ
Clade OR
Clade OS
Clade OT
Clade OU
Clade OV
Clade OW
Clade OX
Clade OY
Clade OZ
Clade PA
Clade PB
Clade PC
Clade PD
Clade PE
Clade PF
Clade PG
Clade PH
Clade PI
Clade PJ
Clade PK
Clade PL
Clade PM
Clade PN
Clade PO
Clade PP
Clade PQ
Clade PR
Clade PS
Clade PT
Clade PU
Clade PV
Clade PW
Clade PX
Clade PY
Clade PZ
Clade QA
Clade QB
Clade QC
Clade QD
Clade QE
Clade QF
Clade QG
Clade QH
Clade QI
Clade QJ
Clade QK
Clade QL
Clade QM
Clade QN
Clade QO
Clade QP
Clade QQ
Clade QR
Clade QS
Clade QT
Clade QU
Clade QV
Clade QW
Clade QX
Clade QY
Clade QZ
Clade RA
Clade RB
Clade RC
Clade RD
Clade RE
Clade RF
Clade RG
Clade RH
Clade RI
Clade RJ
Clade RK
Clade RL
Clade RM
Clade RN
Clade RO
Clade RP
Clade RQ
Clade RR
Clade RS
Clade RT
Clade RU
Clade RV
Clade RW
Clade RX
Clade RY
Clade RZ
Clade SA
Clade SB
Clade SC
Clade SD
Clade SE
Clade SF
Clade SG
Clade SH
Clade SI
Clade SJ
Clade SK
Clade SL
Clade SM
Clade SN
Clade SO
Clade SP
Clade SQ
Clade SR
Clade SS
Clade ST
Clade SU
Clade SV
Clade SW
Clade SX
Clade SY
Clade SZ
Clade TA
Clade TB
Clade TC
Clade TD
Clade TE
Clade TF
Clade TG
Clade TH
Clade TI
Clade TJ
Clade TK
Clade TL
Clade TM
Clade TN
Clade TO
Clade TP
Clade TQ
Clade TR
Clade TS
Clade TT
Clade TU
Clade TV
Clade TW
Clade TX
Clade TY
Clade TZ
Clade UA
Clade UB
Clade UC
Clade UD
Clade UE
Clade UF
Clade UG
Clade UH
Clade UI
Clade UJ
Clade UK
Clade UL
Clade UM
Clade UN
Clade UO
Clade UP
Clade UQ
Clade UR
Clade US
Clade UT
Clade UU
Clade UV
Clade UW
Clade UX
Clade UY
Clade UZ
Clade VA
Clade VB
Clade VC
Clade VD
Clade VE
Clade VF
Clade VG
Clade VH
Clade VI
Clade VJ
Clade VK
Clade VL
Clade VM
Clade VN
Clade VO
Clade VP
Clade VQ
Clade VR
Clade VS
Clade VT
Clade VU
Clade VV
Clade VW
Clade VX
Clade VY
Clade VZ
Clade WA
Clade WB
Clade WC
Clade WD
Clade WE
Clade WF
Clade WG
Clade WH
Clade WI
Clade WJ
Clade WK
Clade WL
Clade WM
Clade WN
Clade WO
Clade WP
Clade WQ
Clade WR
Clade WS
Clade WT
Clade WU
Clade WV
Clade WW
Clade WX
Clade WY
Clade WZ
Clade XA
Clade XB
Clade XC
Clade XD
Clade XE
Clade XF
Clade XG
Clade XH
Clade XI
Clade XJ
Clade XK
Clade XL
Clade XM
Clade XN
Clade XO
Clade XP
Clade XQ
Clade XR
Clade XS
Clade XT
Clade XU
Clade XV
Clade XW
Clade XX
Clade XY
Clade XZ
Clade YA
Clade YB
Clade YC
Clade YD
Clade YE
Clade YF
Clade YG
Clade YH
Clade YI
Clade YJ
Clade YK
Clade YL
Clade YM
Clade YN
Clade YO
Clade YP
Clade YQ
Clade YR
Clade YS
Clade YT
Clade YU
Clade YV
Clade YW
Clade YX
Clade YY
Clade YZ
Clade ZA
Clade ZB
Clade ZC
Clade ZD
Clade ZE
Clade ZF
Clade ZG
Clade ZH
Clade ZI
Clade ZJ
Clade ZK
Clade ZL
Clade ZM
Clade ZN
Clade ZO
Clade ZP
Clade ZQ
Clade ZR
Clade ZS
Clade ZT
Clade ZU
Clade ZV
Clade ZW
Clade ZX
Clade ZY
Clade ZZ

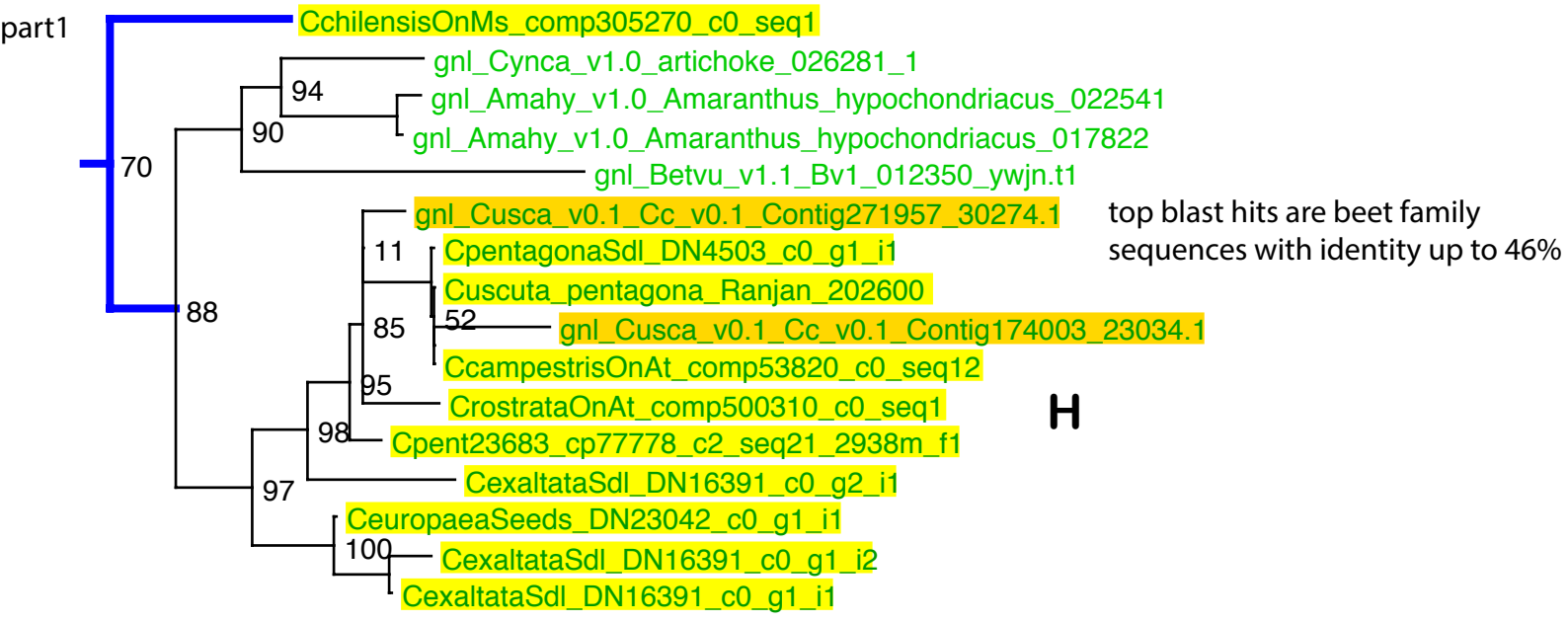
Fig. S4.8_OrthoFinder25

Fig. S4.9_OrthoFinder26

Fig. S4.10_OrthoFinder28

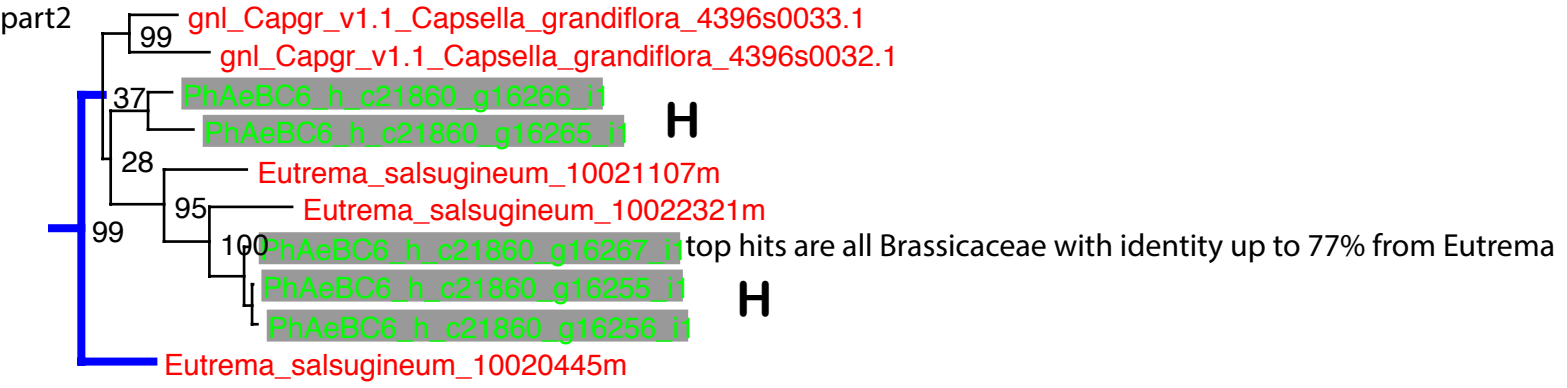
Fig. S4.11_OrthoFinder29

part1



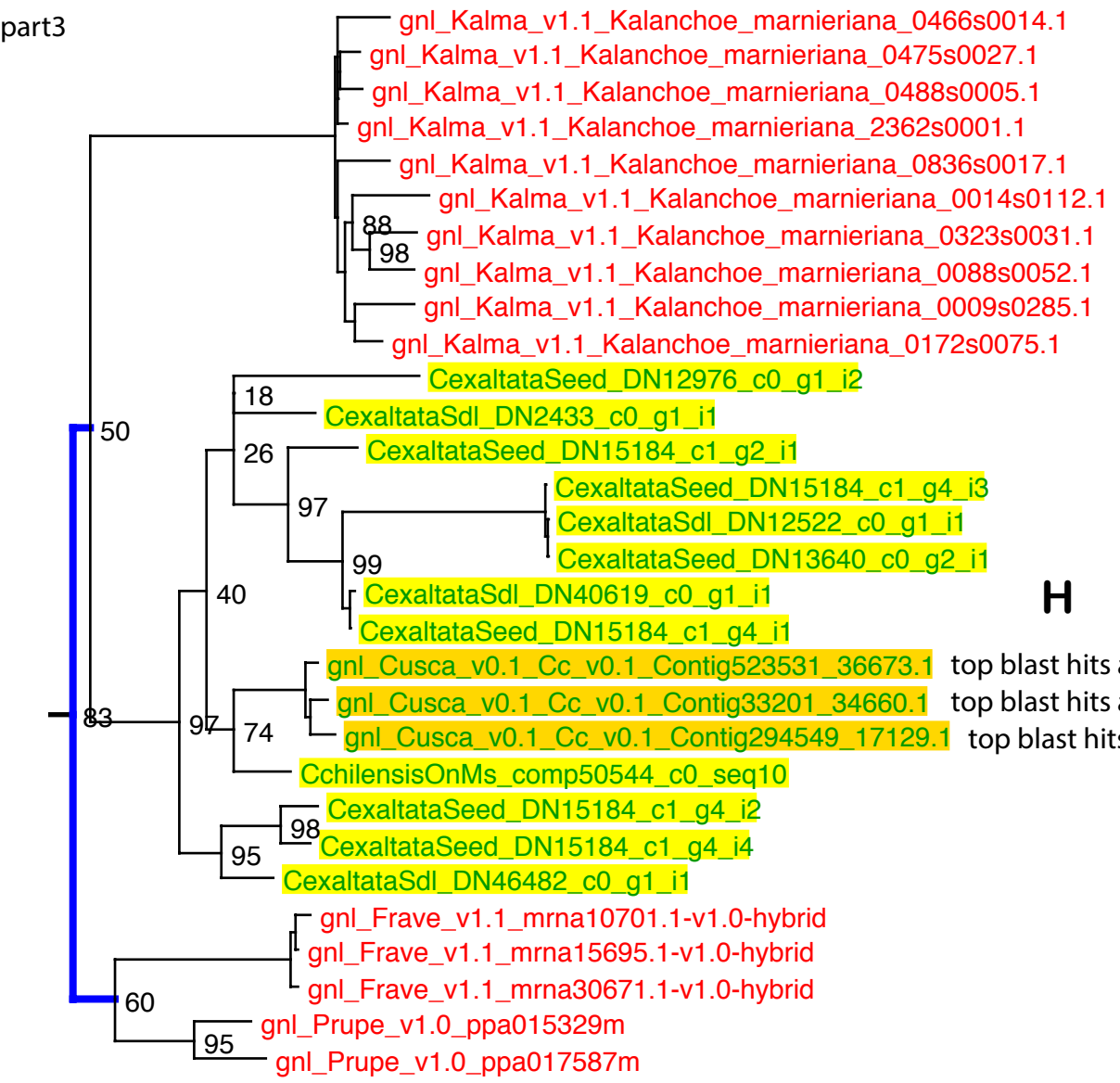
top blast hits are beet family sequences with identity up to 46%

part2



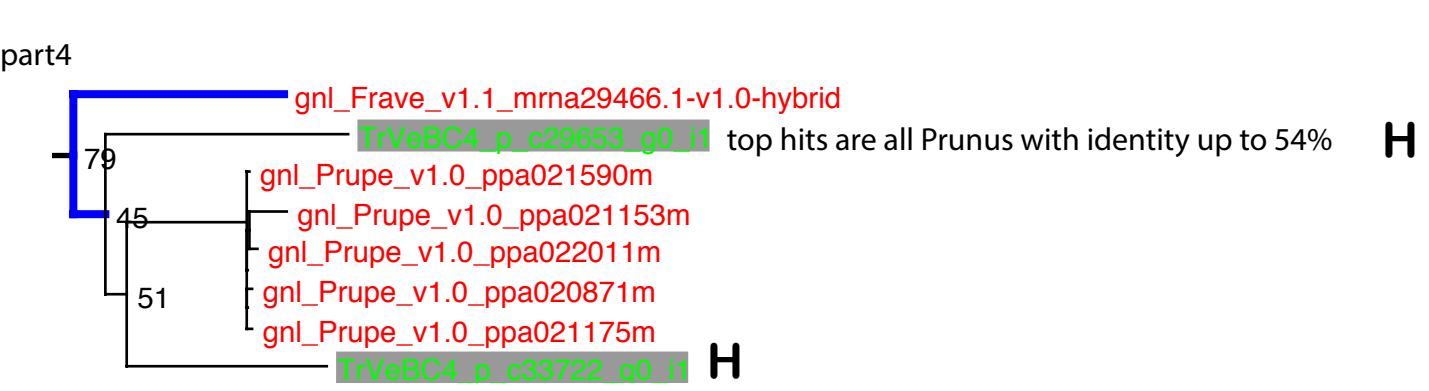
top hits are all Brassicaceae with identity up to 77% from Eutrema

part3



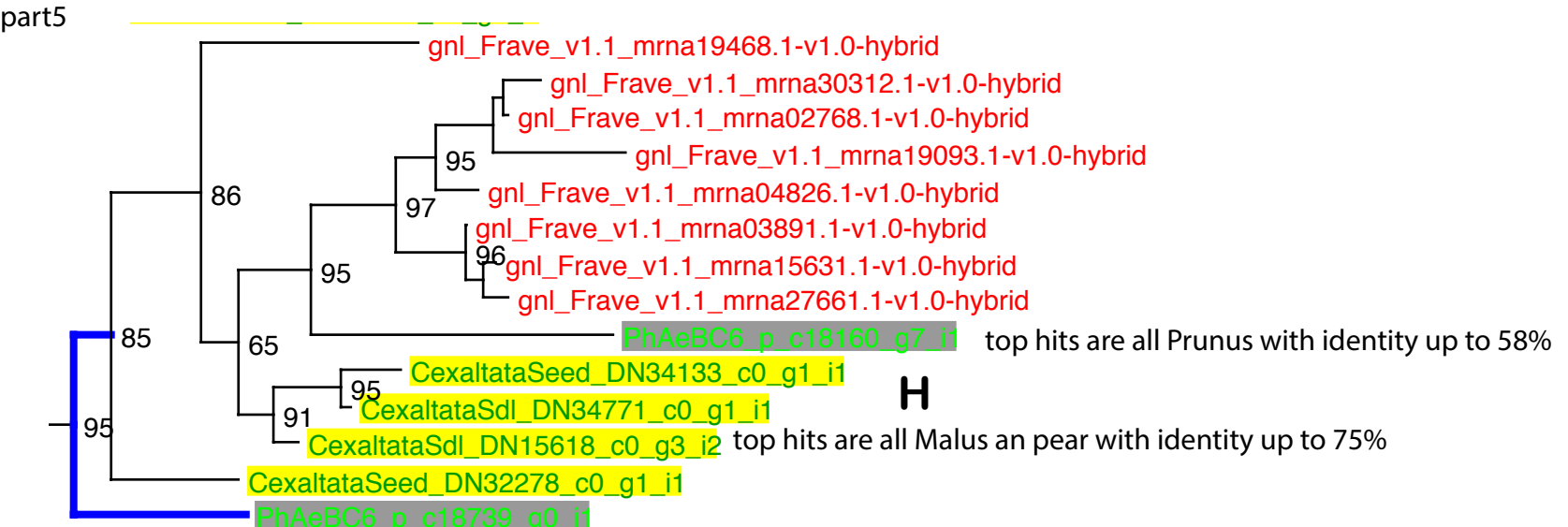
top blast hits are Vitis and Fragaria with identity up to 48%
top blast hits are Fragaria with identity up to 53%
top blast hits are Prunus with identity up to 54%

part4



top hits are all Prunus with identity up to 54%

part5



top hits are all Prunus with identity up to 58%
top hits are all Malus an pear with identity up to 75%

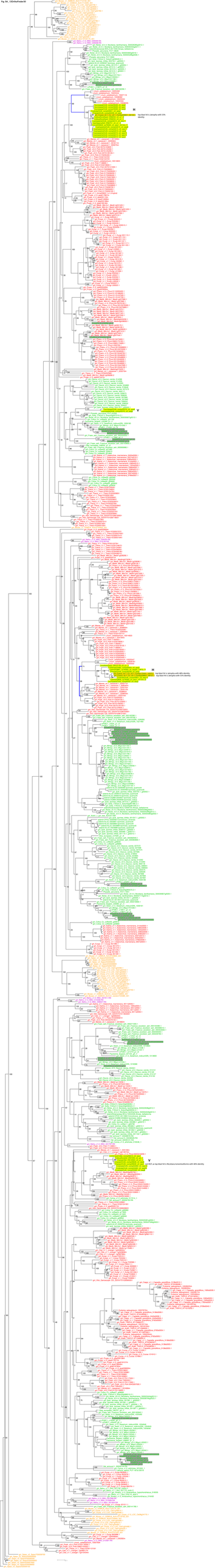


Fig. 9a_1_V2Ordfamilies.tif
H
V
H
V

Fig. S1.15. Arthropleuridea
V
H
Tree Scale: 1

Fig. S4.16_OrthoFinder45

Fig. S4.17_OrthoFinder46

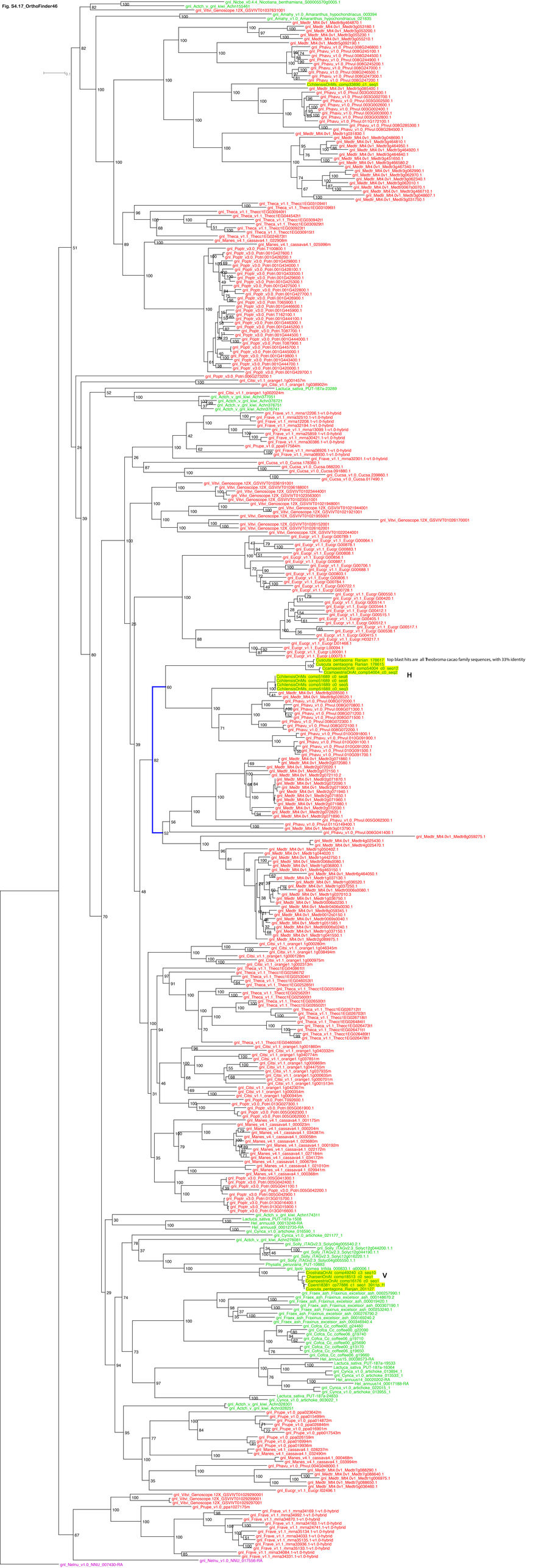


Fig. S4.18_OrthoFinder48_subortho37

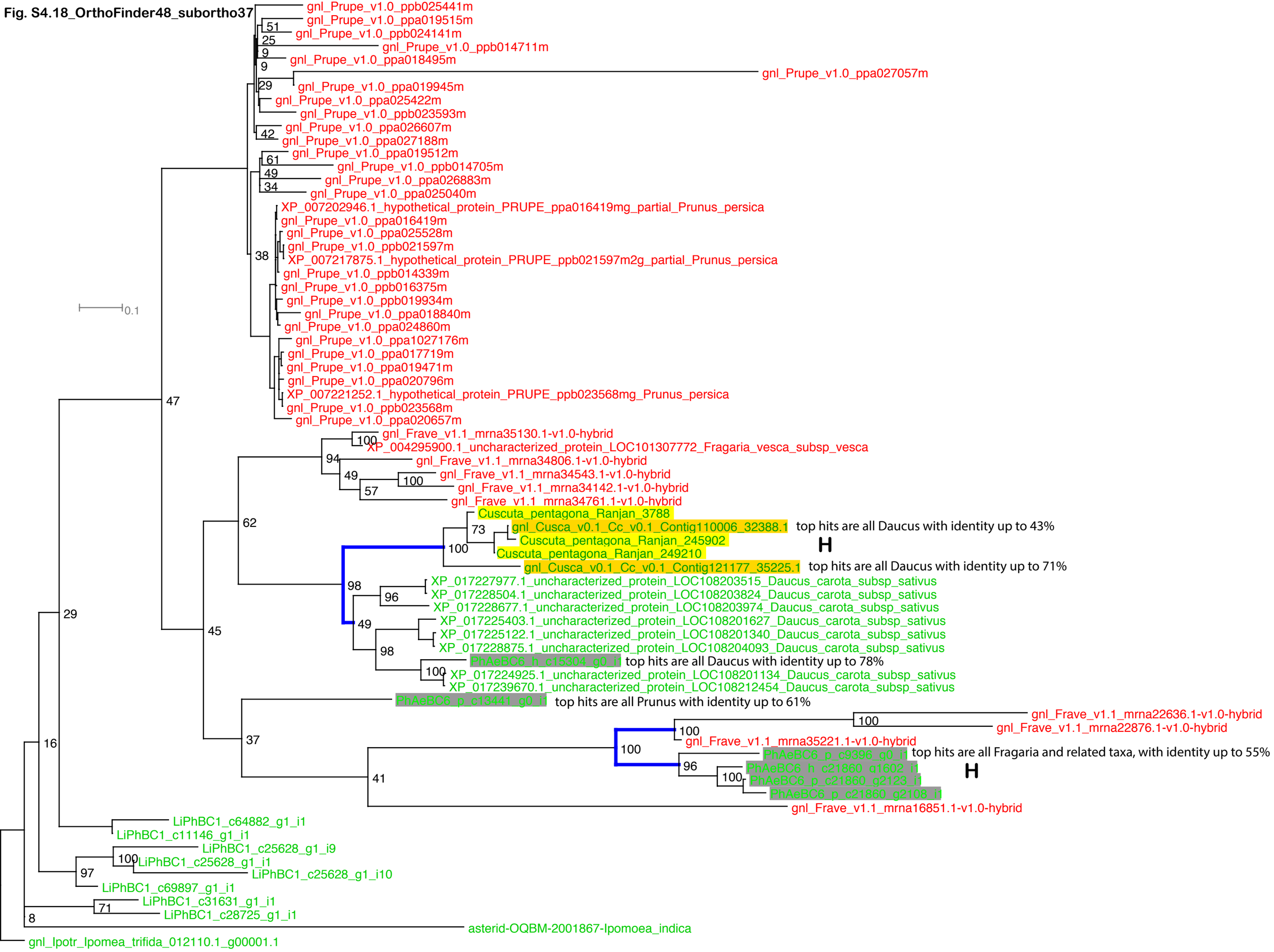


Fig. S4.19_OrthoFinder53

Fig. S4.21_OrthoFinder56

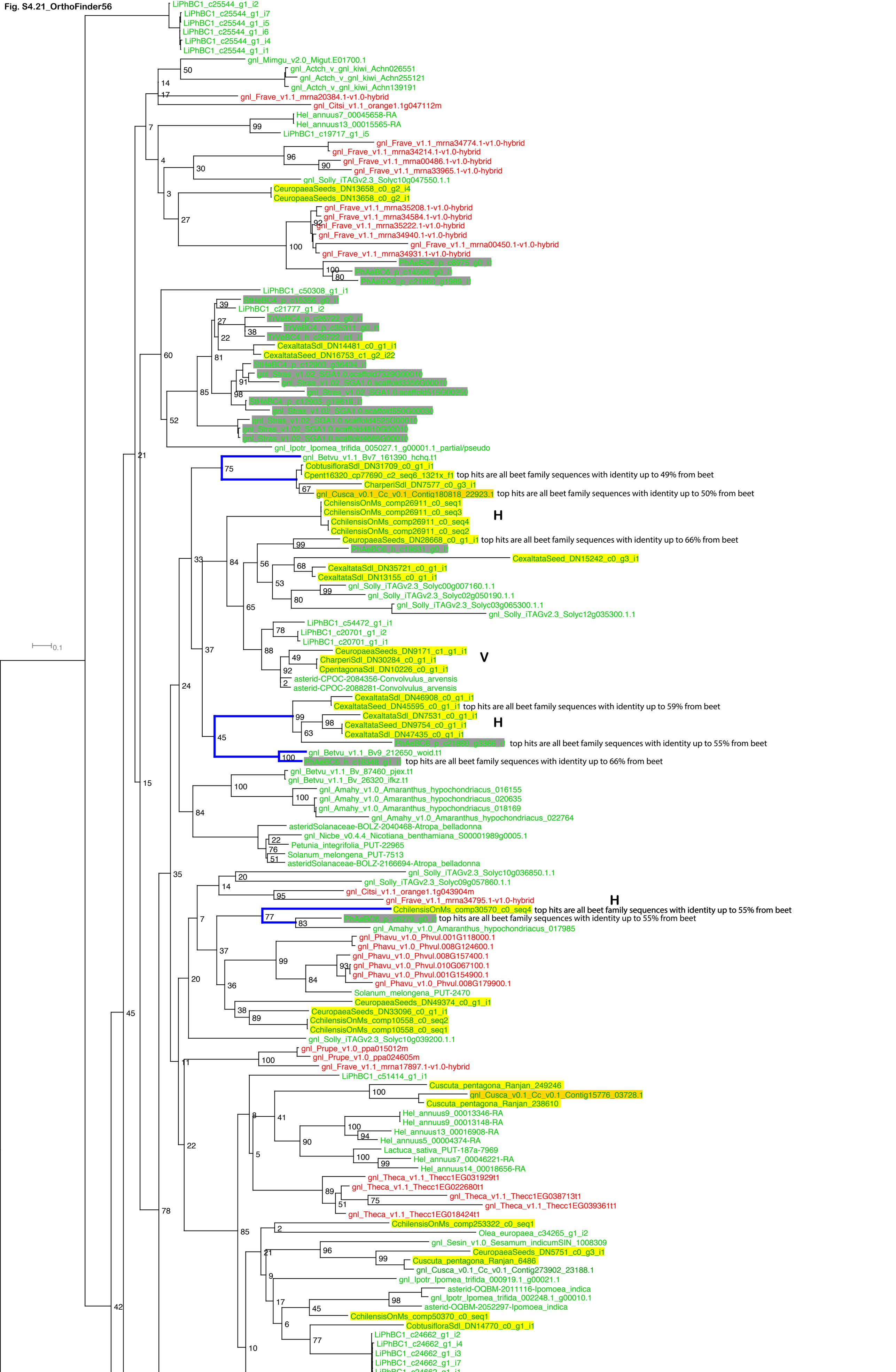


Fig. S4. 22. OrthoFinder60

Fig. S4. (D) Orthorhabdidae
top three lines are all Rha
top three lines are all Rha
top three lines are all Rha

Fig. S4.24_OrthoFinder80_HGT_node

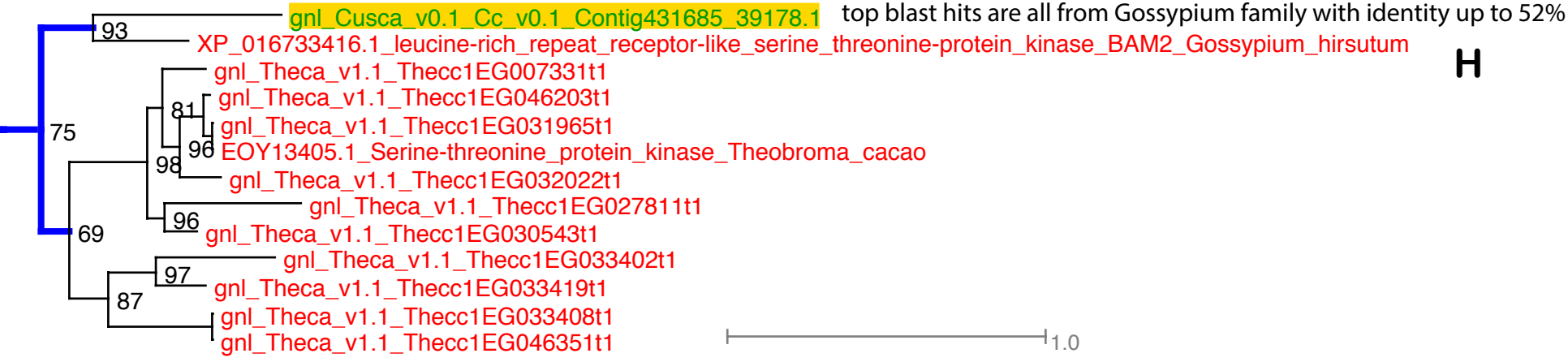


Fig. S4.25_OrthoFinder85

Fig. S4.26_OrthoFinder141
gnl_Ambtr_v1.0_evm.27.model.AmTr_v1.0_scaffold00154.32
gnl_Manes_v4.1_cassava4.1_033390m
gnl_Theca_v1.1_Thecc1EG007720t1
gnl_Spipo_v2_Spipo31G0003700
gnl_Nicbe_v0.4.4_Nicotiana_benthamiana_S00027774g0008.1
gnl_Cofca_Cc_coffee10_g08420
gnl_Theca_v1.1_Thecc1EG007719t1
gnl_Manes_v4.1_cassava4.1_003608m
gnl_Ipotr_Ipomea_trifida_002710.1_g00004.1
gnl_Ipotr_Ipomea_trifida_000072.1_g00005.1
gnl_Sesin_v1.0_Sesamum_indicumSIN_1007345
gnl_Mimgu_v2.0_MigutJ01208.1
gnl_Eucgr_v1.1_Eucgr.C04286.1
gnl_Eucgr_v1.1_Eucgr.F00656.1
gnl_Eucgr_v1.1_Eucgr.G04303.1
gnl_Eucgr_v1.1_Eucgr.C04290.1
gnl_Eucgr_v1.1_Eucgr.B00536.1
gnl_Eucgr_v1.1_Eucgr.C04312.1
gnl_Eucgr_v1.1_Eucgr.C04306.1
gnl_Eucgr_v1.1_Eucgr.C04311.1
gnl_Eucgr_v1.1_Eucgr.F00068.1
gnl_Eucgr_v1.1_Eucgr.C04313.1
gnl_Eucgr_v1.1_Eucgr.F00047.1
gnl_Eucgr_v1.1_Eucgr.C04284.1
gnl_Eucgr_v1.1_Eucgr.G04318.1
gnl_Eucgr_v1.1_Eucgr.C04297.1
gnl_Eucgr_v1.1_Eucgr.C04305.1
gnl_Eucgr_v1.1_Eucgr.F00048.1
gnl_Eucgr_v1.1_Eucgr.G04300.1
gnl_Eucgr_v1.1_Eucgr.F00060.1
gnl_Eucgr_v1.1_Eucgr.C04317.1
gnl_Vitvi_Genoscope.12X_GSVIVT01012819001
gnl_Vitvi_Genoscope.12X_GSVIVT01016019001
gnl_Theca_v1.1_Thecc1EG045946t1
gnl_Cynca_v1.0_artichoke_025784_1
gnl_Cynca_v1.0_artichoke_023727_1
gnl_Cynca_v1.0_artichoke_025543_1
gnl_Cynca_v1.0_artichoke_029734_1
gnl_Cynca_v1.0_artichoke_025886_1
gnl_Cynca_v1.0_artichoke_024172_1
gnl_Cynca_v1.0_artichoke_026399_1
gnl_Cynca_v1.0_artichoke_023733_1
gnl_Cynca_v1.0_artichoke_026074_1
Hel_annuus4_00023861-RA
Hel_annuus4_00023093-RA
Hel_annuus4_00023897-RA
Hel_annuus4_00023864-RA
Hel_annuus4_00023737-RA
Lactuca_sativa_Pur1-1878-30107
gnl_Vitvi_Genoscope.12X_GSVIVT01013974001
gnl_Vitvi_Genoscope.12X_GSVIVT01017407001
gnl_Vitvi_Genoscope.12X_GSVIVT01034276001
gnl_Vitvi_Genoscope.12X_GSVIVT01017404001
gnl_Vitvi_Genoscope.12X_GSVIVT01017390001
gnl_Vitvi_Genoscope.12X_GSVIVT01017399001
gnl_Vitvi_Genoscope.12X_GSVIVT01017385001
gnl_Vitvi_Genoscope.12X_GSVIVT01034291001
gnl_Vitvi_Genoscope.12X_GSVIVT01034283001
gnl_Vitvi_Genoscope.12X_GSVIVT01017396001
gnl_Fraex_ash_Fraxinus_excelsior_ash_000111900.1
asterid-OGBM-2002043-Ipomoea_indica
asterid-OGBM-2002042-Ipomoea_indica
gnl_Ipotr_Ipomea_trifida_004519.1_g00001.1
gnl_Cynca_v0.1_Cc_v0.1_Contig464245_16931.1
gnl_Ipotr_Ipomea_trifida_001814.1_g00002.1
gnl_Ipotr_Ipomea_trifida_000338.1_g00001.1
gnl_Ipotr_Ipomea_trifida_000338.1_g00007.1_TE
gnl_Ipotr_Ipomea_trifida_003957.1_g00003.1_TE
gnl_Manes_v4.1_cassava4.1_026337m
gnl_Manes_v4.1_cassava4.1_030027m
gnl_Manes_v4.1_cassava4.1_025488m
gnl_Manes_v4.1_cassava4.1_028544m
gnl_Manes_v4.1_cassava4.1_020964m
gnl_Manes_v4.1_cassava4.1_033500m
gnl_Manes_v4.1_cassava4.1_001882m
gnl_Nelnu_v1.0_NNU_003816-RA
gnl_Nelnu_v1.0_NNU_003812-RA
gnl_Nelnu_v1.0_NNU_018114-RA
gnl_Phavu_v1.0_Phvul.005G077100.1
gnl_Cofca_Cc_coffee11_g05520
gnl_Cofca_Cc_coffee11_g05590
gnl_Cofca_Cc_coffee11_g00650
gnl_Manes_v4.1_cassava4.1_021560m
gnl_Manes_v4.1_cassava4.1_026118m
gnl_Medtr_Mt4.0v1_Medtr8g077105.1
gnl_Medtr_Mt4.0v1_Medtr3g016200.1
gnl_Cucsa_v1.0_Cucsa.105600.1
gnl_Cucsa_v1.0_Cucsa.105610.1
gnl_Medtr_Mt4.0v1_Medtr4g016780.1
gnl_Medtr_Mt4.0v1_Medtr4g016910.1
gnl_Medtr_Mt4.0v1_Medtr4g016810.1
gnl_Medtr_Mt4.0v1_Medtr4g016800.1
gnl_Medtr_Mt4.0v1_Medtr4g015930.1
gnl_Medtr_Mt4.0v1_Medtr4g016850.1
gnl_Arath_TAIR10_AT1G07390.3
gnl_Capgr_v1.1_Capsella_grandiflora_1671s0360.1
gnl_Arath_TAIR10_AT5G49250.1
gnl_Arath_TAIR10_AT1G74180.1
ecampestrisDhAt_comp50262_c1_seq2
gnl_Arath_TAIR10_AT1G54470.2
gnl_Capgr_v1.1_Capsella_grandiflora_8193s0001.1
Eutrema_salsugineum_10000583m
gnl_Capgr_v1.1_Capsella_grandiflora_2021s0001.1
gnl_Capgr_v1.1_Capsella_grandiflora_2021s0004.1
gnl_Capgr_v1.1_Capsella_grandiflora_8568s0002.1
gnl_Capgr_v1.1_Capsella_grandiflora_2021s0003.1
gnl_Arath_TAIR10_AT2G25470.1
gnl_Arath_TAIR10_AT1G74170.1
Eutrema_salsugineum_10018074m
Eutrema_salsugineum_10018202m
Eutrema_salsugineum_10018188m
Eutrema_salsugineum_10018082m
Eutrema_salsugineum_10018093m
gnl_Arath_TAIR10_AT1G74190.1
Eutrema_salsugineum_10018087m
gnl_Capgr_v1.1_Capsella_grandiflora_13939s0001.1
gnl_Arath_TAIR10_AT3G53240.1
Eutrema_salsugineum_10010101m
Eutrema_salsugineum_10023329m
gnl_Arath_TAIR10_AT1G08190.2
gnl_Citsi_v1.1_orange1.1g038149m
gnl_Citsi_v1.1_orange1.1g041908m
gnl_Citsi_v1.1_orange1.1g042632m
gnl_Citsi_v1.1_orange1.1g045580m
gnl_Citsi_v1.1_orange1.1g047035m
gnl_Citsi_v1.1_orange1.1g043182m
gnl_Citsi_v1.1_orange1.1g043567m
gnl_Citsi_v1.1_orange1.1g043317m
gnl_Citsi_v1.1_orange1.1g036932m
gnl_Citsi_v1.1_orange1.1g002350m
gnl_Citsi_v1.1_orange1.1g005618m
gnl_Betvu_v1.1_Bv9_225670_yiai.t1
gnl_Betvu_v1.1_Bv9_225650_nmvx.t1
gnl_Betvu_v1.1_Bv9_225560_sudo.t1
Cuscuta_pentagona_Ranian_205874
Cuscuta_pentagona_Ranian_205866
CobtusifloraSt6_DN01057_c0_g2_i1
CobtusifloraSeed_DN7881_c0_g1_i2
CreptrataDhAt_comp53999_c0_seq19
CharperiDhAt_comp30295_c0_seq2
CharperiDhAt_comp50870_c1_seq6
top blast hits are all from beet family with identity up to 52%
H
gnl_Poptr_v3.0_Potri.017G018700.1
gnl_Poptr_v3.0_Potri.005G007900.1
gnl_Poptr_v3.0_Potri.005G009700.1
gnl_Poptr_v3.0_Potri.005G011600.1
gnl_Poptr_v3.0_Potri.005G015700.1
gnl_Poptr_v3.0_Potri.005G013400.1
gnl_Poptr_v3.0_Potri.005G016200.1
gnl_Poptr_v3.0_Potri.005G015800.1
gnl_Poptr_v3.0_Potri.005G013100.1
gnl_Poptr_v3.0_Potri.005G016100.1
gnl_Poptr_v3.0_Potri.005G012100.1
gnl_Poptr_v3.0_Potri.005G007600.1
gnl_Poptr_v3.0_Potri.T133400.1
gnl_Poptr_v3.0_Potri.005G006700.1
gnl_Poptr_v3.0_Potri.T155700.1
gnl_Poptr_v3.0_Potri.005G016800.1
gnl_Poptr_v3.0_Potri.005G013800.1
gnl_Poptr_v3.0_Potri.005G009300.1
gnl_Poptr_v3.0_Potri.005G008600.1
gnl_Poptr_v3.0_Potri.005G013200.1
gnl_Poptr_v3.0_Potri.005G009800.1
gnl_Poptr_v3.0_Potri.003G029200.1
gnl_Poptr_v3.0_Potri.003G025100.1
gnl_Poptr_v3.0_Potri.003G027200.1
gnl_Poptr_v3.0_Potri.003G012800.1
gnl_Poptr_v3.0_Potri.003G027600.1
gnl_Poptr_v3.0_Potri.003G028700.1
gnl_Poptr_v3.0_Potri.003G028200.1
gnl_Poptr_v3.0_Potri.003G029400.1
gnl_Poptr_v3.0_Potri.003G013200.1
gnl_Poptr_v3.0_Potri.T040800.1
gnl_Poptr_v3.0_Potri.T041300.1
gnl_Poptr_v3.0_Potri.T041700.1
gnl_Poptr_v3.0_Potri.003G013700.1
gnl_Theca_v1.1_Thecc1EG045041t1
gnl_Theca_v1.1_Thecc1EG045037t1
gnl_Theca_v1.1_Thecc1EG027070t1
gnl_Theca_v1.1_Thecc1EG027065t1
gnl_Actch_v_gnl_kiwi_Achn332631
gnl_Actch_v_gnl_kiwi_Achn332601
gnl_Actch_v_gnl_kiwi_Achn010431
gnl_Actch_v_gnl_kiwi_Achn383691
gnl_Solly_ITAGv2.3_Solyc08g016310.2.1
gnl_Solly_ITAGv2.3_Solyc08g016270.1.1
gnl_Solly_ITAGv2.3_Solyc08g016210.2.1
gnl_Solly_ITAGv2.3_Solyc04g014400.2.1
Physalis_peruviana_PUT-19958
gnl_Ipotr_Ipomea_trifida_010248.1_g00001.1
gnl_Ipotr_Ipomea_trifida_001435.1_g00005.1
asterid-CPOC-2002015-Convolvulus_arvensis
asterid-CPOC-2002014-Convolvulus_arvensis
asterid-CPOC-2002016-Convolvulus_arvensis
asterid-ALUC-2010004-Ipomoea_quamoclit
gnl_Ipotr_Ipomea_trifida_001616.1_g00001.1
asteridSolanaceae-BOLZ-2040822-Atropa_belladonna
gnl_Fraex_ash_Fraxinus_excelsior_ash_000222680.1
Olea_europaea_c46519_g5_i3
gnl_Fraex_ash_Fraxinus_excelsior_ash_000146790.1
gnl_Ipotr_Ipomea_trifida_000321.1_g00021.1
gnl_Ipotr_Ipomea_trifida_000321.1_g00018.1
gnl_Solly_ITAGv2.3_Solyc11g011180.1.1
gnl_Nicbe_v0.4.4_Nicotiana_benthamiana_S00036576g0010.1
Physalis_peruviana_PUT-12851
Physalis_peruviana_PUT-11601
gnl_Nicbe_v0.4.4_Nicotiana_benthamiana_S00036576g0009.1
Physalis_peruviana_PUT-23781
gnl_Actch_v_gnl_kiwi_Achn065221
gnl_Actch_v_gnl_kiwi_Achn218941
gnl_Actch_v_gnl_kiwi_Achn055761
gnl_Actch_v_gnl_kiwi_Achn218931
gnl_Eucgr_v1.1_Eucgr.C03265.1
gnl_Eucgr_v1.1_Eucgr.C04407.1
gnl_Eucgr_v1.1_Eucgr.G04421.1
gnl_Eucgr_v1.1_Eucgr.C04402.1
gnl_Eucgr_v1.1_Eucgr.C04112.1
gnl_Eucgr_v1.1_Eucgr.E04285.1
gnl_Eucgr_v1.1_Eucgr.E04289.1
gnl_Eucgr_v1.1_Eucgr.E04291.1
gnl_Eucgr_v1.1_Eucgr.E04272.1
gnl_Eucgr_v1.1_Eucgr.E04266.1
gnl_Eucgr_v1.1_Eucgr.E04263.1
gnl_Eucgr_v1.1_Eucgr.E04279.1
gnl_Eucgr_v1.1_Eucgr.E04274.1
gnl_Eucgr_v1.1_Eucgr.C04419.1
gnl_Eucgr_v1.1_Eucgr.C04412.1
gnl_Eucgr_v1.1_Eucgr.C04405.1
gnl_Eucgr_v1.1_Eucgr.C04415.1
gnl_Eucgr_v1.1_Eucgr.C04071.1
gnl_Eucgr_v1.1_Eucgr.L03094.1
gnl_Eucgr_v1.1_Eucgr.C04080.1
gnl_Eucgr_v1.1_Eucgr.C04078.1
gnl_Eucgr_v1.1_Eucgr.C04068.1
gnl_Eucgr_v1.1_Eucgr.C04067.1
gnl_Eucgr_v1.1_Eucgr.C04070.1
gnl_Eucgr_v1.1_Eucgr.L03115.1
gnl_Eucgr_v1.1_Eucgr.L03316.1
gnl_Eucgr_v1.1_Eucgr.L02020.1
gnl_Eucgr_v1.1_Eucgr.C04075.1
gnl_Eucgr_v1.1_Eucgr.C04115.1
gnl_Phavu_v1.0_Phvul.008G108400.1
gnl_Phavu_v1.0_Phvul.008G108500.1
gnl_Phavu_v1.0_Phvul.008G109100.1
gnl_Phavu_v1.0_Phvul.008G109300.1
gnl_Phavu_v1.0_Phvul.004G142400.1
gnl_Phavu_v1.0_Phvul.004G142600.1
gnl_Phavu_v1.0_Phvul.004G314270.1
gnl_Phavu_v1.0_Phvul.008G109800.1
gnl_Medtr_Mt4.0v1_Medtr7g066590.1
gnl_Medtr_Mt4.0v1_Medtr7g066620.1
OchlensisOhMs_comp51189_c0_seq9
OchlensisOhMs_comp51189_c0_seq8
gnl_Phavu_v1.0_Phvul.008G111800.1
gnl_Poptr_v3.0_Potri.001G063700.1
gnl_Poptr_v3.0_Potri.T094900.1
gnl_Poptr_v3.0_Potri.018G124400.1
gnl_Poptr_v3.0_Potri.001G063900.1
gnl_Poptr_v3.0_Potri.001G064100.1
gnl_Poptr_v3.0_Potri.003G041900.1
gnl_Poptr_v3.0_Potri.003G041600.1
gnl_Poptr_v3.0_Potri.003G041700.1
gnl_Poptr_v3.0_Potri.003G041400.1
gnl_Poptr_v3.0_Potri.005G042500.1
gnl_Poptr_v3.0_Potri.T094800.1
gnl_Poptr_v3.0_Potri.018G144700.1
gnl_Poptr_v3.0_Potri.001G064900.1
gnl_Poptr_v3.0_Potri.T114300.1
gnl_Poptr_v3.0_Potri.018G144300.1
gnl_Poptr_v3.0_Potri.001G063300.1
gnl_Poptr_v3.0_Potri.T161800.1
gnl_Poptr_v3.0_Potri.018G148000.1
gnl_Poptr_v3.0_Potri.001G063500.1
gnl_Poptr_v3.0_Potri.018G144800.1
gnl_Poptr_v3.0_Potri.T094500.1
gnl_Poptr_v3.0_Potri.001G064600.1
gnl_Poptr_v3.0_Potri.T110100.1
gnl_Poptr_v3.0_Potri.T109300.1
gnl_Poptr_v3.0_Potri.018G117600.1
gnl_Poptr_v3.0_Potri.018G116600.1
gnl_Poptr_v3.0_Potri.018G120700.1
gnl_Poptr_v3.0_Potri.T109500.1
gnl_Poptr_v3.0_Potri.006G061300.1
gnl_Poptr_v3.0_Potri.006G061200.1
gnl_Poptr_v3.0_Potri.006G061000.1
gnl_Manes_v4.1_cassava4.1_027732m
gnl_Manes_v4.1_cassava4.1_032304m
gnl_Manes_v4.1_cassava4.1_033286m
gnl_Manes_v4.1_cassava4.1_021384m
gnl_Manes_v4.1_cassava4.1_030307m
Linum_usitatissimum_10042381
Linum_usitatissimum_10027856
Linum_usitatissimum_10030068
gnl_Manes_v4.1_cassava4.1_025780m
gnl_Citsi_v1.1_orange1.1g040607m
gnl_Citsi_v1.1_orange1.1g046050m
gnl_Citsi_v1.1_orange1.1g012019m
gnl_Citsi_v1.1_orange1.1g046382m
gnl_Citsi_v1.1_orange1.1g001653m
gnl_Citsi_v1.1_orange1.1g040297m
gnl_Citsi_v1.1_orange1.1g049803m
gnl_Citsi_v1.1_orange1.1g001313m
gnl_Citsi_v1.1_orange1.1g004005m
gnl_Citsi_v1.1_orange1.1g045291m
gnl_Citsi_v1.1_orange1.1g041867m
gnl_Citsi_v1.1_orange1.1g039739m
gnl_Citsi_v1.1_orange1.1g040699m
gnl_Citsi_v1.1_orange1.1g004617m
gnl_Citsi_v1.1_orange1.1g037315m
gnl_Citsi_v1.1_orange1.1g030888m
gnl_Citsi_v1.1_orange1.1g044924m
gnl_Citsi_v1.1_orange1.1g042866m
gnl_Citsi_v1.1_orange1.1g038884m
gnl_Citsi_v1.1_orange1.1g044724m
gnl_Citsi_v1.1_orange1.1g010365m
gnl_Citsi_v1.1_orange1.1g045323m
gnl_Citsi_v1.1_orange1.1g044158m
gnl_Citsi_v1.1_orange1.1g044108m
gnl_Citsi_v1.1_orange1.1g040184m
gnl_Citsi_v1.1_orange1.1g038273m
gnl_Citsi_v1.1_orange1.1g037427m
gnl_Theca_v1.1_Thecc1EG038208t2
gnl_Theca_v1.1_Thecc1EG036958t1
gnl_Vitvi_Genoscope.12X_GSVIVT01033937001
gnl_Nelnu_v1.0_NNU_003848-RA
gnl_Nelnu_v1.0_NNU_003851-RA
gnl_Nelnu_v1.0_NNU_024533-RA
gnl_Spipo_v2_Spipo31G0007300
gnl_Spipo_v2_Spipo31G0007200
gnl_Oryza_v7.0_LOC_Os04g55440.1
gnl_Oryza_v7.0_LOC_Os04g55420.1
gnl_Oryza_v7.0_LOC_Os06g08154.1
gnl_Ambtr_v1.0_evm.27.model.AmTr_v1.0_scaffold00150.9
gnl_Ambtr_v1.0_evm.27.model.AmTr_v1.0_scaffold00024.173
gnl_Ambtr_v1.0_evm.27.model.AmTr_v1.0_scaffold00004.197
0.1

Fig. S4.27, OrthoFinder148

Fig. 5A.28, OrthoFinder206

Fig. S4.29_OrthoFinder235

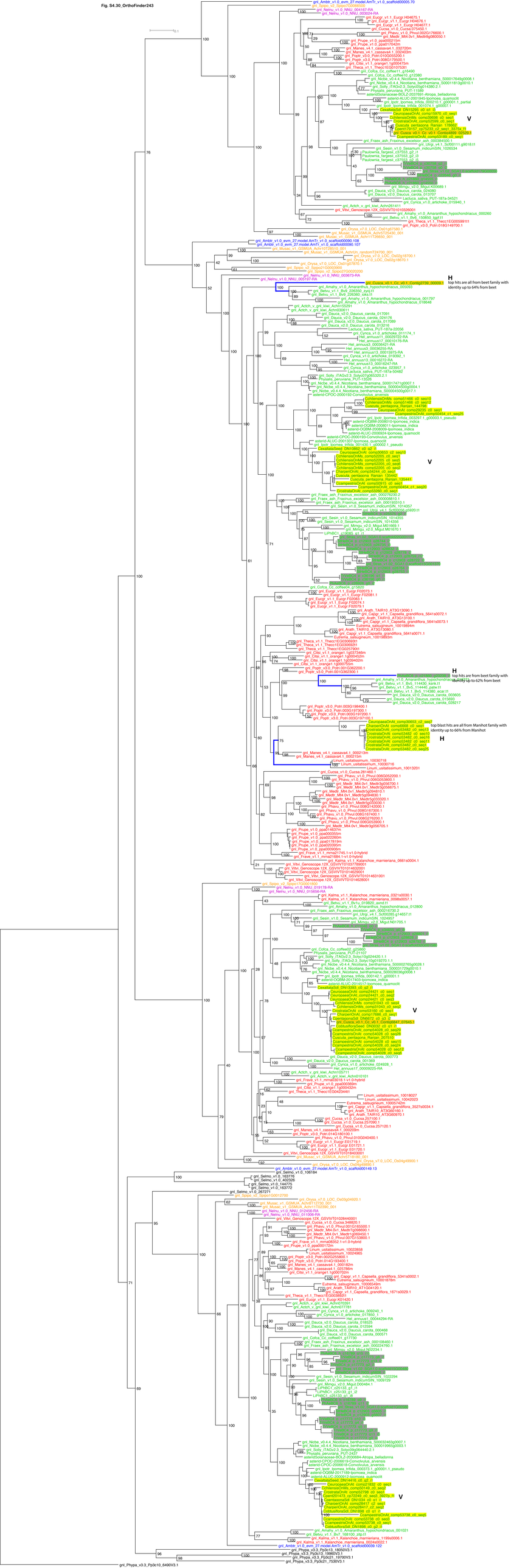


Fig. S4.30_OrthoFinder243
0.1
H
top hits are all from beet family with identity up to 64% from beet
V
H
top hits are from beet family with identity up to 62% from beet
H
top blast hits are all from Manihot family with identity up to 66% from Manihot
V

Fig. S4.31_OrthoFinder249

Fig. S4.32_OrthoFinder309
V
H
H
V
blast against NR and found top hit is Ricinus with 65% identity
top nr hit is Arabidopsis with 89% identity
top nr hit is Raphanus (Brassicaceae) with 83% identity

Fig. S4.33_OrthoFinder413
H
top hits are all from Ricinus family
with identity up to 75% from Ricinus
V
V
0.1

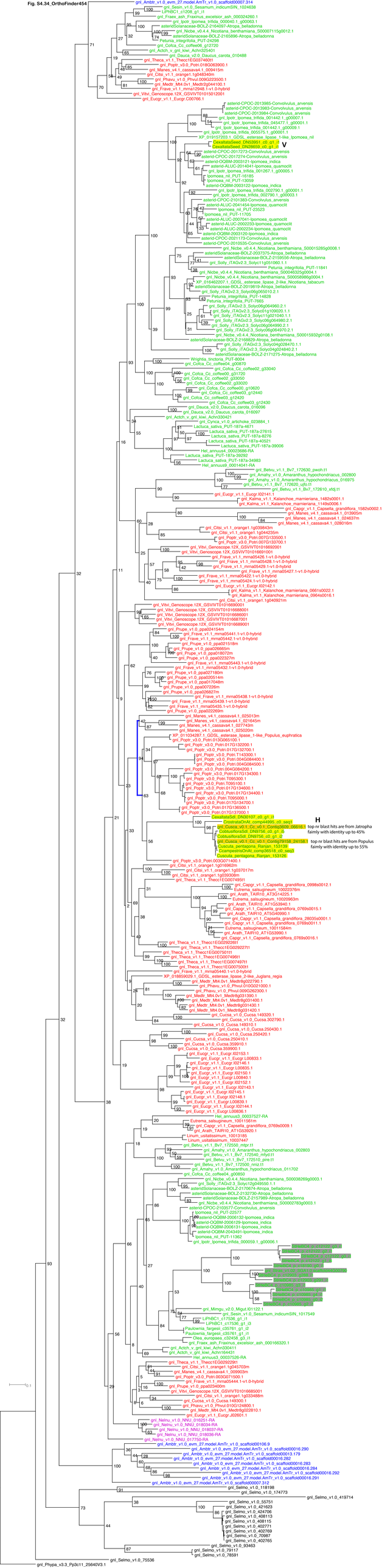


Fig. S4.34_OrthoFinder454
gnl_Ambtr_v1.0_evm_27.model.AmTr_v1.0_scaffold00007.314
gnl_Sesin_v1.0_Sesamum_indicumSIN_1021658
LiPhBC1_c1208_g1_i1
gnl_Fraex_ash_Fraxinus_excelsior_ash_000324260.1
gnl_Ipotr_Ipomea_trifida_000040.1_g00063.1
asterid0Solanaceae-BOLZ-2164097-Atropa_belladonna
gnl_Nicbe_v0.4.4_Nicotiana_benthamiana_S00007115g0012.1
asterid0Solanaceae-BOLZ-2165896-Atropa_belladonna
Petunia_integrifolia_PUT-24298
gnl_Cofca_Cc_coffee06_g12720
gnl_Actch_v_gnl_kiwi_Actch025401
gnl_Dauca_v2.0_Daucus_carota_0104l488
gnl_Theca_v1.1_Thecc1EG037480t1
gnl_Poptr_v3.0_Potri.018G063900.1
gnl_Manes_v4.1_cassava4.1_009415m
gnl_Citsi_v1.1_orange1.1g048340m
gnl_Phavu_v1.0_Phvul.009G023500.1
gnl_Medtr_Mt4.0v1_Medtr8g044100.1
gnl_Frave_v1.1_mrna12948.1-v1.0-hybrid
gnl_Vitvi_Genoscope.12X_GSVIVT01015012001
gnl_Eucgr_v1.1_Eucgr.C007066.1
asterid-CPOC-2013985-Convolvulus_arvensis
asterid-CPOC-2013983-Convolvulus_arvensis
asterid-CPOC-2013984-Convolvulus_arvensis
gnl_Ipotr_Ipomea_trifida_001442.1_g00009.1
gnl_Ipotr_Ipomea_trifida_005575.1_g00001.1
XP_019157203.1_GDSL_esterase_lipase_1-like_Ipomoea_nil
CevalitaSeed_DN53851_c0_g1_i1
CevalitaSeed_DN28659_c0_g1_i1
V
asterid-CPOC-2017273-Convolvulus_arvensis
asterid-CPOC-2017274-Convolvulus_arvensis
asterid-OGBM-2003121-Ipomoea_indica
asterid-ALUC-2014041-Ipomoea_quamoclit
gnl_Ipotr_Ipomea_trifida_001267.1_g00005.1
Ipomoea_nil_PUT-16185
Ipomoea_nil_PUT-13059
asterid-OGBM-2003122-Ipomoea_indica
gnl_Ipotr_Ipomea_trifida_002790.1_g00001.1
gnl_Ipotr_Ipomea_trifida_002790.1_g00003.1
asterid-CPOC-2101383-Convolvulus_arvensis
asterid-ALUC-2014454-Ipomoea_quamoclit
Ipomoea_nil_PUT-23323
Ipomoea_nil_PUT-11705
asterid-ALUC-2007041-Ipomoea_quamoclit
asterid-ALUC-2002233-Ipomoea_quamoclit
asterid-ALUC-2002234-Ipomoea_quamoclit
asterid-OGBM-2003120-Ipomoea_indica
asterid-CPOC-2031173-Convolvulus_arvensis
asterid-CPOC-2010535-Convolvulus_arvensis
gnl_Nicbe_v0.4.4_Nicotiana_benthamiana_S00015285g00008.1
asterid0Solanaceae-BOLZ-2037375-Atropa_belladonna
asterid0Solanaceae-BOLZ-2159556-Atropa_belladonna
gnl_Solly_ITAGv2.3_Solyc11g051060.1.1
Petunia_integrifolia_PUT-11841
gnl_Nicbe_v0.4.4_Nicotiana_benthamiana_S00046325g0004.1
gnl_Nicbe_v0.4.4_Nicotiana_benthamiana_S00058986g0004.1
XP_016462207.1_GDSL_esterase_lipase_2-like_Nicotiana_tabacum
asterid0Solanaceae-BOLZ-2018819-Atropa_belladonna
gnl_Solly_ITAGv2.3_Solyc06g053010.2.1
Petunia_integrifolia_PUT-14828
Petunia_integrifolia_PUT-7665
gnl_Solly_ITAGv2.3_Solyc06g064960.2.1
gnl_Solly_ITAGv2.3_Solyc01g109020.1.1
gnl_Solly_ITAGv2.3_Solyc01g021040.1.1
gnl_Solly_ITAGv2.3_Solyc06g064980.2.1
gnl_Solly_ITAGv2.3_Solyc06g064990.2.1
gnl_Solly_ITAGv2.3_Solyc06g064970.2.1
gnl_Nicbe_v0.4.4_Nicotiana_benthamiana_S00015932g0108.1
asterid0Solanaceae-BOLZ-2168929-Atropa_belladonna
gnl_Solly_ITAGv2.3_Solyc04g028470.1.1
gnl_Solly_ITAGv2.3_Solyc04g054040.2.1
asterid0Solanaceae-BOLZ-2171275-Atropa_belladonna
Wrightia_tinctoria_PUT-8004
gnl_Cofca_Cc_coffee04_g00870
gnl_Cofca_Cc_coffee02_g33040
gnl_Cofca_Cc_coffee00_g31720
gnl_Cofca_Cc_coffee02_g33050
gnl_Cofca_Cc_coffee02_g33030
gnl_Cofca_Cc_coffee00_g10620
gnl_Cofca_Cc_coffee03_g12440
gnl_Cofca_Cc_coffee03_g12420
gnl_Cofca_Cc_coffee03_g12430
gnl_Dauca_v2.0_Daucus_carota_016096
gnl_Dauca_v2.0_Daucus_carota_016097
gnl_Actch_v_gnl_kiwi_Actch030421
gnl_Cynca_v1.0_artichoke_023884_1
Lactuca_sativa_PUT-187a-4571
Lactuca_sativa_PUT-187a-27615
Lactuca_sativa_PUT-187a-8276
Lactuca_sativa_PUT-187a-40521
Lactuca_sativa_PUT-187a-39006
Hel_annuus4_00023686-RA
Lactuca_sativa_PUT-187a-39292
Lactuca_sativa_PUT-187a-34983
Hel_annuus9_00010401-RA
gnl_Betvu_v1.1_Bv7_172630_pwsh.t1
gnl_Amahy_v1.0_Amaranthus_hypochondriacus_002800
gnl_Amahy_v1.0_Amaranthus_hypochondriacus_016975
gnl_Betvu_v1.1_Bv7_172820_ujfp.t1
gnl_Betvu_v1.1_Bv7_172610_xfdj.t1
gnl_Eucgr_v1.1_Eucgr.I020141.1
gnl_Kalma_v1.1_Kalanchoe_marnieriana_1482s0001.1
gnl_Kalma_v1.1_Kalanchoe_marnieriana_1149s0006.1
gnl_Cagpr_v1.1_Capsella_grandiflora_1582s0002.1
gnl_Manes_v4.1_cassava4.1_013905m
gnl_Manes_v4.1_cassava4.1_024637m
gnl_Manes_v4.1_cassava4.1_028016m
gnl_Citsi_v1.1_orange1.1g034643m
gnl_Citsi_v1.1_orange1.1g044235m
gnl_Poptr_v3.0_Potri.007G133500.1
gnl_Poptr_v3.0_Potri.007G133700.1
gnl_Vitvi_Genoscope.12X_GSVIVT01016692001
gnl_Vitvi_Genoscope.12X_GSVIVT01016691001
gnl_Frave_v1.1_mrna05426.1-v1.0-hybrid
gnl_Frave_v1.1_mrna05428.1-v1.0-hybrid
gnl_Frave_v1.1_mrna05429.1-v1.0-hybrid
gnl_Frave_v1.1_mrna05427.1-v1.0-hybrid
gnl_Frave_v1.1_mrna05422.1-v1.0-hybrid
gnl_Frave_v1.1_mrna05424.1-v1.0-hybrid
gnl_Eucgr_v1.1_Eucgr.I02142.1
gnl_Kalma_v1.1_Kalanchoe_marnieriana_0661s0022.1
gnl_Kalma_v1.1_Kalanchoe_marnieriana_0664s0016.1
gnl_Citsi_v1.1_orange1.1g040921m
gnl_Vitvi_Genoscope.12X_GSVIVT01016689001
gnl_Vitvi_Genoscope.12X_GSVIVT01016688001
gnl_Vitvi_Genoscope.12X_GSVIVT01016686001
gnl_Vitvi_Genoscope.12X_GSVIVT01016687001
gnl_Vitvi_Genoscope.12X_GSVIVT01016689001
gnl_Prupe_v1.0_ppa024154m
gnl_Frave_v1.1_mrna05441.1-v1.0-hybrid
gnl_Frave_v1.1_mrna05442.1-v1.0-hybrid
gnl_Prupe_v1.0_ppa021518m
gnl_Prupe_v1.0_ppa026665m
gnl_Prupe_v1.0_ppa018072m
gnl_Prupe_v1.0_ppa022327m
gnl_Frave_v1.1_mrna05443.1-v1.0-hybrid
gnl_Frave_v1.1_mrna05432.1-v1.0-hybrid
gnl_Prupe_v1.0_ppa027180m
gnl_Prupe_v1.0_ppa020514m
gnl_Prupe_v1.0_ppa017048m
gnl_Prupe_v1.0_ppa007226m
gnl_Prupe_v1.0_ppa026827m
gnl_Frave_v1.1_mrna05438.1-v1.0-hybrid
gnl_Frave_v1.1_mrna05439.1-v1.0-hybrid
gnl_Frave_v1.1_mrna05435.1-v1.0-hybrid
gnl_Prupe_v1.0_ppa022269m
gnl_Manes_v4.1_cassava4.1_025013m
gnl_Manes_v4.1_cassava4.1_021645m
gnl_Manes_v4.1_cassava4.1_027743m
gnl_Manes_v4.1_cassava4.1_025020m
XP_011034287.1_GDSL_esterase_lipase_1-like_Populus_euphratica
gnl_Poptr_v3.0_Potri.013G065100.1
gnl_Poptr_v3.0_Potri.017G132200.1
gnl_Poptr_v3.0_Potri.017G132700.1
gnl_Poptr_v3.0_Potri.T143300.1
gnl_Poptr_v3.0_Potri.004G084400.1
gnl_Poptr_v3.0_Potri.004G084500.1
gnl_Poptr_v3.0_Potri.004G084200.1
gnl_Poptr_v3.0_Potri.017G134300.1
gnl_Poptr_v3.0_Potri.T095300.1
gnl_Poptr_v3.0_Potri.T095100.1
gnl_Poptr_v3.0_Potri.017G134600.1
gnl_Poptr_v3.0_Potri.017G134000.1
gnl_Poptr_v3.0_Potri.T095000.1
gnl_Poptr_v3.0_Potri.017G134700.1
gnl_Poptr_v3.0_Potri.017G136500.1
gnl_Poptr_v3.0_Potri.017G137000.1
CevalitaSoil_DN30107_c0_g1_i1
CrastrataOnAU_comp44995_c0_seq1
gnl_Cusca_v0.1_Cc_v0.1_Contig3609_06616.1
CobtusifloraSoil_DN9756_c0_g1_i5
CobtusifloraSoil_DN9756_c0_g1_i2
gnl_Cusca_v0.1_Cc_v0.1_Contig79158_24158.1
Cuscuta_pentagona_Ranjan_153139
EcampestrisOnAU_comp38518_c0_seq3
Cuscuta_pentagona_Ranjan_153126
H
top nr blast hits are from Jatropha
faimly with identity up to 45%
top nr blast hits are from Populus
faimly with identity up to 55%
gnl_Poptr_v3.0_Potri.003G071400.1
gnl_Citsi_v1.1_orange1.1g016962m
gnl_Citsi_v1.1_orange1.1g037017m
gnl_Citsi_v1.1_orange1.1g039306m
gnl_Theca_v1.1_Thecc1EG007495t1
gnl_Cagpr_v1.1_Capsella_grandiflora_0998s0012.1
Eutrema_salsugineum_10022376m
gnl_Arath_TAIR10_AT3G14225.1
Eutrema_salsugineum_10029963m
gnl_Arath_TAIR10_AT1G53940.1
gnl_Cagpr_v1.1_Capsella_grandiflora_0769s0015.1
gnl_Arath_TAIR10_AT5G40990.1
gnl_Cagpr_v1.1_Capsella_grandiflora_28035s0001.1
gnl_Cagpr_v1.1_Capsella_grandiflora_0769s0011.1
Eutrema_salsugineum_10011584m
gnl_Arath_TAIR10_AT1G53990.1
gnl_Cagpr_v1.1_Capsella_grandiflora_0769s0016.1
gnl_Theca_v1.1_Thecc1EG029280t1
gnl_Theca_v1.1_Thecc1EG029227t1
gnl_Theca_v1.1_Thecc1EG007591t1
gnl_Theca_v1.1_Thecc1EG007496t1
gnl_Theca_v1.1_Thecc1EG007497t1
gnl_Theca_v1.1_Thecc1EG007500t1
gnl_Frave_v1.1_mrna05440.1-v1.0-hybrid
XP_018850609.1_GDSL_esterase_lipase_2-like_Juglans_regia
gnl_Medtr_Mt4.0v1_Medtr8g022790.1
gnl_Phavu_v1.0_Phvul.010G021000.1
gnl_Phavu_v1.0_Phvul.009G262300.1
gnl_Medtr_Mt4.0v1_Medtr8g031390.1
gnl_Medtr_Mt4.0v1_Medtr8g031400.1
gnl_Medtr_Mt4.0v1_Medtr8g031410.1
gnl_Medtr_Mt4.0v1_Medtr8g031420.1
gnl_Cucsa_v1.0_Cucsa.149300.1
gnl_Cucsa_v1.0_Cucsa.302790.1
gnl_Cucsa_v1.0_Cucsa.149310.1
gnl_Cucsa_v1.0_Cucsa.250430.1
gnl_Cucsa_v1.0_Cucsa.250420.1
gnl_Cucsa_v1.0_Cucsa.250410.1
gnl_Cucsa_v1.0_Cucsa.359910.1
gnl_Cucsa_v1.0_Cucsa.359900.1
gnl_Eucgr_v1.1_Eucgr.I02153.1
gnl_Eucgr_v1.1_Eucgr.L00833.1
gnl_Eucgr_v1.1_Eucgr.I02146.1
gnl_Eucgr_v1.1_Eucgr.L00835.1
gnl_Eucgr_v1.1_Eucgr.I02150.1
gnl_Eucgr_v1.1_Eucgr.L00840.1
gnl_Eucgr_v1.1_Eucgr.I02152.1
gnl_Eucgr_v1.1_Eucgr.I02143.1
gnl_Eucgr_v1.1_Eucgr.I02145.1
gnl_Eucgr_v1.1_Eucgr.I02148.1
gnl_Eucgr_v1.1_Eucgr.L00839.1
gnl_Eucgr_v1.1_Eucgr.I02144.1
gnl_Eucgr_v1.1_Eucgr.L00836.1
Hel_annuus3_00037527-RA
Eutrema_salsugineum_10011561m
gnl_Cagpr_v1.1_Capsella_grandiflora_0769s0009.1
gnl_Arath_TAIR10_AT1G53920.1
Linum_usitatissimum_10013185
Linum_usitatissimum_10037447
gnl_Betvu_v1.1_Bv7_172550_mtpr.t1
gnl_Amahy_v1.0_Amaranthus_hypochondriacus_002803
gnl_Betvu_v1.1_Bv7_172540_mfyd.t1
gnl_Betvu_v1.1_Bv7_172510_pire.t1
gnl_Betvu_v1.1_Bv7_172520_mlz.t1
gnl_Amahy_v1.0_Amaranthus_hypochondriacus_011702
gnl_Cofca_Cc_coffee04_g00850
gnl_Nicbe_v0.4.4_Nicotiana_benthamiana_S00038269g0003.1
gnl_Solly_ITAGv2.3_Solyc12g045550.1.1
asterid0Solanaceae-BOLZ-2170674-Atropa_belladonna
asterid0Solanaceae-BOLZ-2132730-Atropa_belladonna
asterid0Solanaceae-BOLZ-2157989-Atropa_belladonna
gnl_Nicbe_v0.4.4_Nicotiana_benthamiana_S00002783g0003.1
asterid-CPOC-2103377-Convolvulus_arvensis
Ipomoea_nil_PUT-22577
asterid-OGBM-2006132-Ipomoea_indica
asterid-OGBM-2006129-Ipomoea_indica
asterid-OGBM-2006131-Ipomoea_indica
asterid-OGBM-2043491-Ipomoea_indica
Ipomoea_nil_PUT-11362
gnl_Ipotr_Ipomea_trifida_000059.1_g00006.1
Sesamum_indicum_10001
Sesamum_indicum_10002
Sesamum_indicum_10003
Sesamum_indicum_10004
Sesamum_indicum_10005
Sesamum_indicum_10006
Sesamum_indicum_10007
Sesamum_indicum_10008
Sesamum_indicum_10009
Sesamum_indicum_10010
gnl_Mimgu_v2.0_Migut.I01122.1
gnl_Sesin_v1.0_Sesamum_indicumSIN_1017549
LiPhBC1_c17536_g1_i1
LiPhBC1_c17536_g1_i3
Paulownia_fargesii_c35761_g1_i2
Paulownia_fargesii_c35761_g1_i1
Olea_europaea_c32458_g3_i1
gnl_Fraex_ash_Fraxinus_excelsior_ash_000166320.1
gnl_Actch_v_gnl_kiwi_Actch030411
gnl_Actch_v_gnl_kiwi_Actch164431
Hel_annuus3_00037526-RA
gnl_Theca_v1.1_Thecc1EG029229t1
gnl_Citsi_v1.1_orange1.1g045703m
gnl_Manes_v4.1_cassava4.1_009903m
gnl_Poptr_v3.0_Potri.003G071500.1
gnl_Frave_v1.1_mrna05444.1-v1.0-hybrid
gnl_Prupe_v1.0_ppa023400m
gnl_Vitvi_Genoscope.12X_GSVIVT01016685001
gnl_Citsi_v1.1_orange1.1g033488m
gnl_Cucsa_v1.0_Cucsa.149300.1
gnl_Phavu_v1.0_Phvul.010G124800.1
gnl_Medtr_Mt4.0v1_Medtr8g022810.1
gnl_Eucgr_v1.1_Eucgr.J02601.1
gnl_Nelnu_v1.0_NNU_016251-RA
gnl_Nelnu_v1.0_NNU_018034-RA
gnl_Nelnu_v1.0_NNU_018037-RA
gnl_Nelnu_v1.0_NNU_018036-RA
gnl_Nelnu_v1.0_NNU_017750-RA
gnl_Ambtr_v1.0_evm_27.model.AmTr_v1.0_scaffold00106.9
gnl_Ambtr_v1.0_evm_27.model.AmTr_v1.0_scaffold00016.290
gnl_Ambtr_v1.0_evm_27.model.AmTr_v1.0_scaffold00003.179
gnl_Ambtr_v1.0_evm_27.model.AmTr_v1.0_scaffold00016.282
gnl_Ambtr_v1.0_evm_27.model.AmTr_v1.0_scaffold00016.283
gnl_Ambtr_v1.0_evm_27.model.AmTr_v1.0_scaffold00016.284
gnl_Ambtr_v1.0_evm_27.model.AmTr_v1.0_scaffold00016.292
gnl_Ambtr_v1.0_evm_27.model.AmTr_v1.0_scaffold00016.291
gnl_Ambtr_v1.0_evm_27.model.AmTr_v1.0_scaffold00007.312
gnl_Selmo_v1.0_118198
gnl_Selmo_v1.0_174773
gnl_Selmo_v1.0_419714
gnl_Selmo_v1.0_55751
gnl_Selmo_v1.0_421623
gnl_Selmo_v1.0_424706
gnl_Selmo_v1.0_408113
gnl_Selmo_v1.0_408115
gnl_Selmo_v1.0_402771
gnl_Selmo_v1.0_402769
gnl_Selmo_v1.0_70987
gnl_Selmo_v1.0_402765
gnl_Selmo_v1.0_93463
gnl_Selmo_v1.0_79317
gnl_Selmo_v1.0_78591
gnl_Phypa_v3.3_Pp3c11_25640V3.1
gnl_Selmo_v1.0_75536
0.1

Fig. S4.35_OrthoFinder571
gnl_Selmo_v1.0_78511
gnl_Capgr_v1.1_Capsella_grandiflora_1582s0007.1
Eutrema_salsugineum_10022329m
Eutrema_salsugineum_10021980m
gnl_Arath_TAIR10_AT3G14250.1
gnl_Kalma_v1.1_Kalanchoe_marnieriana_0007s0146.1
gnl_Orysa_v7.0_LOC_Os08g11170.1
gnl_Orysa_v7.0_LOC_Os08g35070.1
gnl_Orysa_v7.0_LOC_Os08g35060.1
gnl_Musac_v1_GSMUA_Achr9T14270_001
gnl_Eucgr_v1.1_Eucgr.I02157.1
gnl_Cusca_v0.1_Cc_v0.1_Contig98655_22181.1
gnl_Cusca_v0.1_Cc_v0.1_Contig713300_35156.1
gnl_Ipotr_Ipomea_trifida_000443.1_g00004.1
gnl_Nelnu_v1.0_NNU_018161-RA
gnl_Nelnu_v1.0_NNU_010527-RA
gnl_Nelnu_v1.0_NNU_010528-RA
asterid-CPOC-2017539-Convolvulus_arvensis
asterid-OQBM-2016702-Ipomoea_indica
gnl_Ipotr_Ipomea_trifida_000973.1_g00009.1_TE
CeuropaeaOnAt_comp59929_c0_seq1
CexaltataSeed_DN15752_c1_g7_i1
gnl_Mimgu_v2.0_Migut.D01157.1
gnl_Mimgu_v2.0_Migut.D01160.1
gnl_Mimgu_v2.0_Migut.D01161.1
Paulownia_fargesii_c27445_g1_i1
gnl_Sesin_v1.0_Sesamum_indicumSIN_1010816
LiPhGnB2_6160.1
gnl_Sesin_v1.0_Sesamum_indicumSIN_1022004
gnl_Fraex_ash_Fraxinus_excelsior_ash_000191040.1
gnl_Fraex_ash_Fraxinus_excelsior_ash_000315230.1
gnl_Cofca_Cc_coffee00_g30460
gnl_Cofca_Cc_coffee04_g05500
gnl_Cofca_Cc_coffee00_g29440
gnl_Solly_ITAGv2.3_Solyc06g068640.1.1
gnl_Vitvi_Genoscope.12X_GSVIVT01016055001
gnl_Vitvi_Genoscope.12X_GSVIVT01016056001
gnl_Medtr_Mt4.0v1_Medtr1g105460.1
gnl_Medtr_Mt4.0v1_Medtr1g105465.1
gnl_Prupe_v1.0_ppa009570m
gnl_Frave_v1.1_mrna15879.1-v1.0-hybrid
gnl_Citsi_v1.1_orange1.1g045388m
gnlMaes_v4.1Icassava4.1_013046m
gnlMaes_v4.1Icassava4.1_030770m
gnlMaes_v4.1Icassava4.1_013071m
gnlMaes_v4.1Icassava4.1_024176m
gnlMaes_v4.1cassava4.1_013155m
gnl_Poptr_v3.0_Potri.003G187700.1
gnl_Poptr_v3.0_Potri.001G037200.1
gnl_Theca_v1.1_Thecc1EG029275t1
gnl_Theca_v1.1_Thecc1EG02927401
gnl_Eucgr_v1.1_Eucgr.E03058.1
gnl_Eucgr_v1.1_Eucgr.E03591.1
gnl_Eucgr_v1.1_Eucgr.E03050.1
gnl_Eucgr_v1.1_Eucgr.E03579.1
gnl_Eucgr_v1.1_Eucgr.E03577.1
gnl_Eucgr_v1.1_Eucgr.E03590.1
gnl_Eucgr_v1.1_Eucgr.E03057.1
Linum_usitatissimum_10024093
Linum_usitatissimum_10000412
Linum_usitatissimum_10026104
gnl_Actch_v_gnl_kiwi_Achn213301
gnl_Actch_v_gnl_kiwi_Achn222171
gnl_Actch_v_gnl_kiwi_Achn087951
gnl_Fraex_ash_Fraxinus_excelsior_ash_000281780.1
LiPhGnB2_11388.1
LiPhGnB2_11388.2
LiPhGnB2_11388.3
Paulownia_fargesii_c9795_g1_i1
gnl_Mimgu_v2.0_Migut.N02823.1
gnl_Sesin_v1.0_Sesamum_indicumSIN_1011324
gnl_Utrgl_v4.1_Scf00474.g18264.t1
gnl_Ipotr_Ipomea_trifida_001863.1_g00004.1_TE
gnl_Ipotr_Ipomea_trifida_001863.1_g00003.1
asterid-OQBM-2013279-Ipomoea_indica
gnl_Solly_ITAGv2.3_Solyc04g077000.2.1
gnl_Nicbe_v0.4.4_Nicotiana_benthamiana_S00011859g0005.1
gnl_Nicbe_v0.4.4_Nicotiana_benthamiana_S00006500g0012.1
gnl_Cofca_Cc_coffee10_g08060
Hel_annuus8_00041267-RA
gnl_Cynca_v1.0_artichoke_021468_1
Lactuca_sativa_PUT-187a-15946
gnl_Dauca_v2.0_Daucus_carota_020035
gnl_Ipotr_Ipomea_trifida_002296.1_g00009.1
gnl_Solly_ITAGv2.3_Solyc03g115920.2.1
gnl_Nicbe_v0.4.4_Nicotiana_benthamiana_S00004739g0006.1
gnl_Nicbe_v0.4.4_Nicotiana_benthamiana_S00036825g0003.1
gnl_Sesin_v1.0_Sesamum_indicumSIN_1010815
LiPhGnB2_19747.1
LiPhGnB2_19747.2
Paulownia_fargesii_c56853_g1_i1
gnl_Mimgu_v2.0_Migut.D01158.1
gnl_Mimgu_v2.0_Migut.D01155.1
Hel_annuus14_00017760-RA
gnl_Cynca_v1.0_artichoke_013942_1
Lactuca_sativa_PUT-187a-38601
gnl_Cynca_v1.0_artichoke_023885_1
gnl_Amahy_v1.0_Amaranthus_hypochondriacus_002806
gnl_Betvu_v1.1_Bv7_172450_ezym.t1
gnl_Theca_v1.1_Thecc1EG032420t1
CeuropaeaSeeds_DN10801_c0_g1_i1
CchilensisOnMs_comp48419_c1_seq13
CpentagonaSdl_DN4132_c0_g1_i1
gnl_Cusca_v0.1_Cc_v0.1_Contig209294_29296.1
CcampestrisOnAt_comp47944_c0_seq12
CcampestrisOnAt_comp47944_c0_seq3
Cuscuta_pentagona_Ranjan_178795
Cuscuta_pentagona_Ranjan_178793
gnl_Cusca_v0.1_Cc_v0.1_Contig26956_34057.1
CpentagonaSdl_DN4132_c0_g2_i1
CobtusifloraSeed_DN18419_c0_g1_i1
gnl_Cusca_v0.1_Cc_v0.1_Contig286807_34360.1
CcampestrisOnAt_comp47944_c0_seq2
Cuscuta_pentagona_Ranjan_178792
CcampestrisOnAt_comp47944_c0_seq1
CharperiSdl_DN5075_c0_g1_i1
CcampestrisOnAt_comp47944_c0_seq11
gnl_Medtr_Mt4.0v1_Medtr5g078410.1
gnl_Medtr_Mt4.0v1_Medtr3g462560.1
gnl_Medtr_Mt4.0v1_Medtr3g462530.1
gnl_Medtr_Mt4.0v1_Medtr3g462570.1
gnl_Medtr_Mt4.0v1_Medtr5g062990.1
gnl_Medtr_Mt4.0v1_Medtr3g462590.1
gnl_Medtr_Mt4.0v1_Medtr3g462500.1
gnl_Medtr_Mt4.0v1_Medtr3g462430.1
gnl_Medtr_Mt4.0v1_Medtr0777s0010.1
gnl_Medtr_Mt4.0v1_Medtr3g463310.1
gnl_Medtr_Mt4.0v1_Medtr3g463280.1
gnlPhavu_v1.0Phvul.010G124500.1
gnlPhavu_v1.0Phvul.010G124100.1
gnlPhavu_v1.0Phvul.010G124200.1
gnl_Medtr_Mt4.0v1_Medtr4g063810.1
gnl_Medtr_Mt4.0v1_Medtr4g063815.1
gnl_Medtr_Mt4.0v1_Medtr8g022900.1
gnl_Dauca_v2.0_Daucus_carota_022651
gnl_Theca_v1.1_Thecc1EG02923601
gnl_Prupe_v1.0_ppa021508m
gnl_Frave_v1.1_mrna05452.1-v1.0-hybrid
gnl_Ambtr_v1.0_evm_27.model.AmTr_v1.0_scaffold00129.93
gnl_Ambtr_v1.0_evm_27.model.AmTr_v1.0_scaffold00129.87
gnl_Ambtr_v1.0_evm_27.model.AmTr_v1.0_scaffold00129.89
gnl_Ambtr_v1.0_evm_27.model.AmTr_v1.0_scaffold00129.91
gnl_Ambtr_v1.0_evm_27.model.AmTr_v1.0_scaffold00129.90
gnl_Orysa_v7.0_LOC_Os09g25260.1
gnl_Orysa_v7.0_LOC_Os09g25220.1
gnl_Orysa_v7.0_LOC_Os09g25190.1
gnl_Musac_v1_GSMUA_Achr9T18100_001
gnl_Musac_v1_GSMUA_Achr3T05810_001
gnl_Medtr_Mt4.0v1_Medtr2g044440.1
gnl_Medtr_Mt4.0v1_Medtr2g044250.1
gnl_Medtr_Mt4.0v1_Medtr2g044420.1
gnl_Medtr_Mt4.0v1_Medtr2g044260.1
gnl_Medtr_Mt4.0v1_Medtr2g044290.1
gnlPhavu_v1.0Phvul.009G223300.1
gnl_Frave_v1.1_mrna24668.1-v1.0-hybrid
gnl_Eucgr_v1.1_Eucgr.C03191.1
gnl_Eucgr_v1.1_Eucgr.C03193.1
gnl_Eucgr_v1.1_Eucgr.C03190.1
gnl_Vitvi_Genoscope.12X_GSVIVT01015008001
gnl_Actch_v_gnl_kiwi_Achn084031
gnl_Dauca_v2.0_Daucus_carota_023797
gnl_Dauca_v2.0_Daucus_carota_027146
gnl_Dauca_v2.0_Daucus_carota_011915
gnl_Dauca_v2.0_Daucus_carota_011911
gnl_Dauca_v2.0_Daucus_carota_011909
gnl_Dauca_v2.0_Daucus_carota_011912
gnl_Dauca_v2.0_Daucus_carota_011913
gnl_Dauca_v2.0_Daucus_carota_011914
Olea_europaea_c39789_g1_i2
Olea_europaea_c39789_g1_i1
gnl_Fraex_ash_Fraxinus_excelsior_ash_000128310.1
SlHeBC4_p_c27850_g3679_i1
SlHeBC4_p_c27850_g3680_i1
LiPhGnB2_16545.1
LiPhGnB2_16545.3
LiPhGnB2_16545.2
gnl_SlStra_v1.02_SGA1.0.scaffold121G00250
gnl_SlStra_v1.02_SGA1.0.scaffold121G00240
SlHeBC4_p_c21937_g1_i1
gnl_SlStra_v1.02_SGA1.0.scaffold121G00220
gnl_SlStra_v1.02_SGA1.0.scaffold121G00230
SlHeBC4_p_c12903_g2064_i1
SlHeBC4_p_c12903_g2065_i1
SlHeBC4_p_c12903_g2063_i1
gnl_SlStra_v1.02_SGA1.0.scaffold121G00260
gnl_Mimgu_v2.0_Migut.D01143.1
gnl_Mimgu_v2.0_Migut.L01597.1
gnl_Sesin_v1.0_Sesamum_indicumSIN_1007540
gnl_Utrgl_v4.1_Scf00153.g10748.t1
gnl_Cofca_Cc_coffee06_g12760
CchilensisOnMs_comp34437_c0_seq1
gnl_Cusca_v0.1_Cc_v0.1_Contig256684_10817.1
CharperiOnAt_comp29716_c0_seq2
gnl_Ipotr_Ipomea_trifida_000526.1_g00003.1
gnl_Ipotr_Ipomea_trifida_011043.1_g00001.1
gnl_Ipotr_Ipomea_trifida_001679.1_g00008.1
gnl_Ipotr_Ipomea_trifida_005691.1_g00004.1
gnl_Ipotr_Ipomea_trifida_001598.1_g00002.1
CexaltataSdl_DN38819_c0_g1_i1
CeuropaeaOnAt_comp105908_c0_seq1
CchilensisOnMs_comp86936_c0_seq1
CrostrataOnAt_comp13606_c0_seq1
CcampestrisOnAt_comp33181_c0_seq2
gnl_Solly_ITAGv2.3_Solyc03g005970.2.1
asteridSolanaceae-BOLZ-2168818-Atropa_belladonna
gnl_Nicbe_v0.4.4_Nicotiana_benthamiana_S00008102g0007.1
gnl_Nicbe_v0.4.4_Nicotiana_benthamiana_S00008102g0006.1
gnl_Nicbe_v0.4.4_Nicotiana_benthamiana_S00029425g0002.1
gnl_Frave_v1.1_mrna12954.1-v1.0-hybrid
gnl_Frave_v1.1_mrna12952.1-v1.0-hybrid
gnl_Frave_v1.1_mrna12951.1-v1.0-hybrid
gnl_Prupe_v1.0_ppa015337m
Linum_usitatissimum_10022063
gnlMaes_v4.1cassava4.1_027237m
gnl_Medtr_Mt4.0v1_Medtr2g044240.1
gnl_Amahy_v1.0_Amaranthus_hypochondriacus_006709
gnl_Betvu_v1.1_Bv8_195330_kfqo.t1
gnl_Frave_v1.1_mrna12947.1-v1.0-hybrid
gnl_Frave_v1.1_mrna19779.1-v1.0-hybrid
gnl_Frave_v1.1_mrna09239.1-v1.0-hybrid
gnl_Prupe_v1.0_ppa016287m
gnl_Prupe_v1.0_ppa024847m
gnl_Frave_v1.1_mrna12957.1-v1.0-hybrid
gnl_Prupe_v1.0_ppa007740m
gnl_Frave_v1.1_mrna12955.1-v1.0-hybrid
gnlMaes_v4.1Icassava4.1_032249m
gnl_Poptr_v3.0_Potri.018G064400.1
gnl_Citsi_v1.1_orange1.1g019929m
gnl_Citsi_v1.1_orange1.1g025608m
gnl_Citsi_v1.1_orange1.1g048441m
gnl_Citsi_v1.1_orange1.1g041841m
gnl_Citsi_v1.1_orange1.1g048114m
gnl_Theca_v1.1_Thecc1EG037456t2
Eutrema_salsugineum_10000966m
gnl_Capgr_v1.1_Capsella_grandiflora_2858s0007.1
gnl_Capgr_v1.1_Capsella_grandiflora_0612s0093.1
gnl_Arath_TAIR10_AT3G53690.1
gnl_Kalma_v1.1_Kalanchoe_marnieriana_0042s0019.1
gnl_Kalma_v1.1_Kalanchoe_marnieriana_0092s0076.1
gnl_Ipotr_Ipomea_trifida_000059.1_g00004.1
gnl_Cucsa_v1.0_Cucsa.236890.1
gnl_Cucsa_v1.0_Cucsa.149270.1
gnl_Phypa_v3.3_Pp3c3_13290V3.1
V
V
V
V
H
top nr hit is legume with 63% identity,
top nr hits are all legumes
0.1

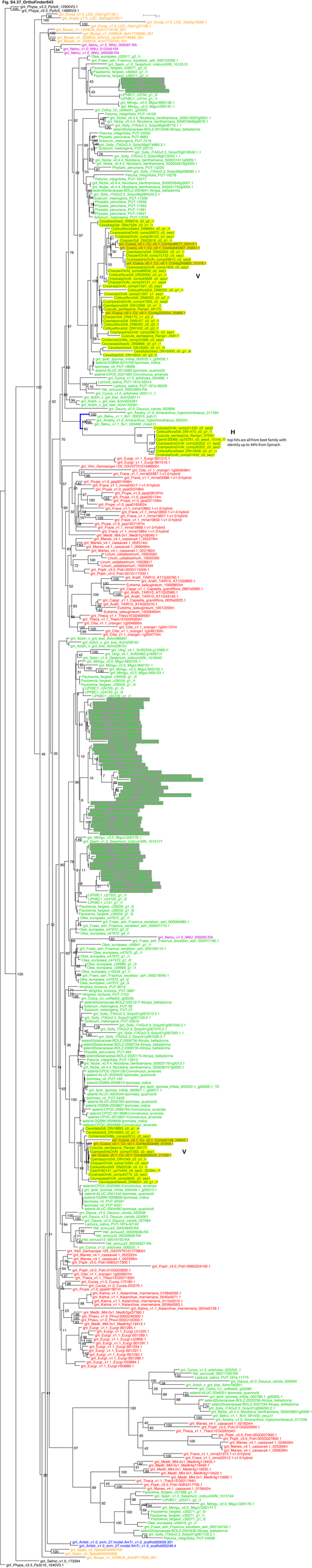


Fig. S4.37 OrthoFinder643
H
top hits are all from beet family with identity up to 44% from Spinach
V
V

Fig. S4.38_OrthoFinder680

gnl_Phypa_v3.3_Pp3c24_12090V3.1
gnl_Phypa_v3.3_Pp3c8_16430V3.1
gnl_Phypa_v3.3_Pp3c20_10970V3.1
Eutrema_salsugineum_10023430m
gnl_Calgr_v1.1_Capsella_grandiflora_1670s00390.1
gnl_Arath_TAIR10_AT1G62710.1
Linum_usitatissimum_10032206
Linum_usitatissimum_10024599
gnl_Kalma_v1.1_Kalanchoe_marnieriana_0086s0078.1
gnl_Kalma_v1.1_Kalanchoe_marnieriana_0273s0021.1
gnl_Manes_v4.1_cassava4.1_0055851m
gnl_Manes_v4.1_cassava4.1_0065544t
gnl_Poptr_v3.0_Potri.001G119600.1
gnl_Poptr_v3.0_Potri.003G113300.1
gnl_Phaeu_v1.0_PhaeuSpg1_0.0082217500.1
gnl_Medtr_Mt4.0v1_Medtr4g101730.1
gnl_Frave_v1.1_mma032256.1-v1.0-hybrid
gnl_Phupe_v1.0_ppa004795m
gnl_Theca_v1.1_ThecoTEG01603701
gnl_Citsi_v1.1_orange1.1g011817m
gnl_Cucsa_v1.0_Cucsa.302130.1
gnl_Eucgr_v1.1_Eucgr.D00925.1
gnl_Vitvi_Genoscope.12X_GSVIVT01006037001
CrocetiaIsoOrAl_comp51265_c0_seq1
Lactuca_sativa_PUT-187a-11744
Hel_annuus17_00008701-RA
Daucus_v2.0_Daucus_carota_004915
gnl_Daucus_v2.0_Daucus_carota_027803
gnl_Daucus_v2.0_Daucus_carota_027804
gnl_Daucus_v2.0_Daucus_carota_027805
gnl_Cynca_v1.0_artichoke_002429_1
Hel_annuus17_00006887-RA
gnl_Cynca_v1.0_artichoke_006047_1
gnl_Cynca_v1.0_artichoke_006944_1
gnl_Cynca_v1.0_artichoke_006045_1
Hel_annuus3_00036094-RA
Hel_annuus3_00037165-RA
Hel_annuus3_00037165-PA
Hel_annuus13_00016577-RA
Hel_annuus6_00007232-RA
Hel_annuus13_00016582-RA
Lactuca_sativa_PUT-187a-22334
asterid|Solanaceae-BOLZ-2153076-Atropa_belladonna
gnl_Solly_ITAGv2.3_Solyc06g076160.2.1
asterid|Solanaceae-BOLZ-2153626-Atropa_belladonna
gnl_Nicbe_v0.4.4_Nicotiana_benthamiana_S0005755bg0007.1
gnl_Ipotr_Ipomea_trifida_0009958.1_g00004.1
asterid-CPOC-2091729-Convolvulus_arvensis
asterid-CPOC-2012729-Convolvulus_arvensis
asterid-CPOC-2093905-Convolvulus_arvensis
gnl_Ipotr_Ipomea_trifida_0000808.1_g00015.1
asterid-CPOC-2100675-Convolvulus_arvensis
SesaIsoSesa1_DN14284_c0_g1_i4
Wrightia_tinctoria_PUT-5621
gnl_Cofca_Cc_coffee08_g13000
gnl_Cofca_Cc_coffee08_g13010
gnl_Olea_europaea_c19214_g1_i1
Olea_europaea_c20210_g1_i1
gnl_Fraex_ash_Fraxinus_excelsior_ash_0000634601
gnl_Sesin_v1.0_Sesamum_indicum58s_1021470
gnl_Mimgu_v2.0_Migut.E01691.1
gnl_Mimgu_v2.0_Migut.E00968.1
LiPhBC1_c22682_g1_i1
LiPhBC1_c22682_g1_i2
LiPhBC1_c22682_g1_i3
LiPhBC1_c22682_g1_i4
LiPhBC1_c22682_g1_i5
LiPhBC1_c22682_g1_i6
LiPhBC1_c22682_g1_i7
LiPhBC1_c22682_g1_i8
LiPhBC1_c22682_g1_i9
LiPhBC1_c22682_g1_i10
LiPhBC1_c22682_g1_i11
LiPhBC1_c22682_g1_i12
LiPhBC1_c22682_g1_i13
LiPhBC1_c22682_g1_i14
LiPhBC1_c22682_g1_i15
LiPhBC1_c22682_g1_i16
LiPhBC1_c22682_g1_i17
LiPhBC1_c22682_g1_i18
LiPhBC1_c22682_g1_i19
LiPhBC1_c22682_g1_i20
LiPhBC1_c22682_g1_i21
LiPhBC1_c22682_g1_i22
LiPhBC1_c22682_g1_i23
LiPhBC1_c22682_g1_i24
LiPhBC1_c22682_g1_i25
LiPhBC1_c22682_g1_i26
LiPhBC1_c22682_g1_i27
LiPhBC1_c22682_g1_i28
LiPhBC1_c22682_g1_i29
LiPhBC1_c22682_g1_i30
LiPhBC1_c22682_g1_i31
LiPhBC1_c22682_g1_i32
LiPhBC1_c22682_g1_i33
LiPhBC1_c22682_g1_i34
LiPhBC1_c22682_g1_i35
LiPhBC1_c22682_g1_i36
LiPhBC1_c22682_g1_i37
LiPhBC1_c22682_g1_i38
LiPhBC1_c22682_g1_i39
LiPhBC1_c22682_g1_i40

Fig. S4.39_OrthoFinder850
gnl_Selmo_v1.0_75785
gnl_Selmo_v1.0_270532
gnl_Orysa_V7.0_LOC_Os08g33710.1
Lactuca_sativa_PUT-187a-56155
gnl_Orysa_v7.0_LOC_Os07g43600.1
gnl_Orysa_v7.0_LOC_Os07g43670.1
gnl_Spipo_v2_Spipo4G0023600
gnl_Spipo_v2_Spipo4G0024200
gnl_Musac_v1_GSMUA_Achr7T21030_001
gnl_Musac_v1_GSMUA_Achr4T00460_001
0.1
gnl_Kalma_v1.1_Kalanchoe_marnieriana_0009s0087.1
gnl_Kalma_v1.1_Kalanchoe_marnieriana_0465s0017.1
gnl_Kalma_v1.1_Kalanchoe_marnieriana_0476s0040.1
Linum_usitatissimum_10027978
gnl_Kalma_v1.1_Kalanchoe_marnieriana_0854s0005.1
gnl_Kalma_v1.1_Kalanchoe_marnieriana_0152s0071.1
Linum_usitatissimum_10030468
Linum_usitatissimum_10012823
gnl_Capgr_v1.1_Capsella_grandiflora_0534s0011.1
gnl_Arath_TAIR10_AT2G02990.1
Eutrema_salsugineum_10004863m
gnl_Theca_v1.1_Thecc1EG011700t1
gnl_Poptr_v3.0_Potri.008G086700.1
gnl_Poptr_v3.0_Potri.010G168700.1
gnlPhavu_v1.0lPhvul.002G170800.1
gnlPhavu_v1.0lPhvul.002G084600.1
gnl_Medtr_Mt4.0v1_Medtr5g040960.1
gnl_Medtr_Mt4.0v1_Medtr5g040940.1
gnl_Dauca_v2.0_Daucus_carota_007156
gnl_Sesin_v1.0_Sesamum_indicumSIN_1018192
gnl_Cofca_Cc_coffee11_g12930
Lactuca_sativa_PUT-187a-30480
gnl_Betvu_v1.1_Bv6_153290_zgjk.t1
gnl_Betvu_v1.1_Bv6_153300_tcqf.t1
gnl_Amahy_v1.0_Amaranthus_hypochondriacus_015109
gnl_Actch_v_gnl_kiwi_Achn197841
gnlIManes_v4.1cassava4.1_021910m
Linum_usitatissimum_10035882
Linum_usitatissimum_10035881
Linum_usitatissimum_10022385
Linum_usitatissimum_10003110
Linum_usitatissimum_10023371
gnl_Cucsa_v1.0_Cucsa.158310.1
gnl_Prupe_v1.0_ppa018459m
gnl_Cucsa_v1.0_Cucsa.080950.1
gnl_Cucsa_v1.0_Cucsa.378780.1
gnl_Cucsa_v1.0_Cucsa.378920.1
gnl_Frave_v1.1_mrna22673.1-v1.0-hybrid
gnl_Prupe_v1.0_ppa024151m
gnl_Frave_v1.1_mrna00227.1-v1.0-hybrid
gnlIPhavu_v1.0lPhvul.004G064100.1
gnlIPhavu_v1.0lPhvul.004G052000.1
gnlIPhavu_v1.0lPhvul.004G056000.1
gnlIPhavu_v1.0lPhvul.004G056100.1
gnl_Medtr_Mt4.0v1_Medtr2g021910.1
SlHeBC4_p_c16672_g2_i1
SlHeBC4_p_c16672_g1_i1
gnl_Medtr_Mt4.0v1_Medtr2g021750.1
gnl_Medtr_Mt4.0v1_Medtr6g090200.1
gnl_Medtr_Mt4.0v1_Medtr5g086410.1
gnl_Medtr_Mt4.0v1_Medtr0129s0080.1
gnl_Medtr_Mt4.0v1_Medtr1g048200.1
gnl_Medtr_Mt4.0v1_Medtr3g030660.1
gnl_Medtr_Mt4.0v1_Medtr3g030640.1
gnl_Medtr_Mt4.0v1_Medtr4g057825.1
gnlIPhavu_v1.0lPhvul.006G112900.1
gnlIPhavu_v1.0lPhvul.006G112700.1
gnlIPhavu_v1.0lPhvul.006G112800.1
gnl_Cucsa_v1.0_Cucsa.338820.1
gnl_Cucsa_v1.0_Cucsa.338800.1
gnl_Mimgu_v2.0_Migut.H00903.1
gnl_STrac_v1.02_SCAf10c108c00820
EhaBSC8_h_c20582_g0_i1
Solanum_melongena_PUT-23909
asteridSolanaceae-BOLZ-2040702-Atropa_belladonna
Petunia_integrifolia_PUT-18149
gnl_Solly_iTAGv2.3_Solyc07g006570.2.1
asteridSolanaceae-BOLZ-2168826-Atropa_belladonna
asteridSolanaceae-BOLZ-2167671-Atropa_belladonna
gnl_Cofca_Cc_coffee02_g08300
gnl_Cofca_Cc_coffee05_g03730
gnl_Cofca_Cc_coffee05_g03770
gnl_Cofca_Cc_coffee01_g01910
gnl_Cofca_Cc_coffee00_g21550
Petunia_integrifolia_PUT-19492
Petunia_integrifolia_PUT-25335
gnl_Nicbe_v0.4.4_Nicotiana_benthamiana_S00014593g0003.1
gnl_Solly_iTAGv2.3_Solyc01g055200.1.1
Petunia_integrifolia_PUT-10263
Petunia_integrifolia_PUT-14154
Petunia_integrifolia_PUT-24085
Petunia_integrifolia_PUT-6110
gnl_Medtr_Mt4.0v1_Medtr5g459500.1
SlHeBC4_p_c23585_c0_i1
SlHeBC4_p_c19334_g0_i1
gnl_Citsi_v1.1_orange1.1g044555m
gnl_Citsi_v1.1_orange1.1g042583m
asterid-CPOC-2107486-Convolvulus_arvensis
Ipomoea_nil_PUT-6623591
Ipomoea_nil_PUT-17570
gnl_Ipotr_Ipomea_trifida_000103.1_g00001.1
gnl_Utrgi_v4.1_Scf00414.g17248.t1
Hel_annuus12_00033861-RA
gnl_Cynca_v1.0_artichoke_000151_1
gnl_Dauca_v2.0_Daucus_carota_031017
gnl_Dauca_v2.0_Daucus_carota_031018
gnl_Cofca_Cc_coffee11_g12940
gnl_Solly_iTAGv2.3_Solyc05g007940.2.1
gnl_Nicbe_v0.4.4_Nicotiana_benthamiana_S00010447g0101.1
gnl_Nicbe_v0.4.4_Nicotiana_benthamiana_S00033844g0004.1
CexaltataSeed_DN19577_c0_g1_i1
CeuropaeaOnAt_comp17109_c0_seq2
V
asterid-CPOC-2022112-Convolvulus_arvensis
Ipomoea_nil_PUT-18018
gnl_Ipotr_Ipomea_trifida_000314.1_g00014.1
gnl_Fraex_ash_Fraxinus_excelsior_ash_000181430.1
Olea_europaea_c26818_g2_i1
gnl_Fraex_ash_Fraxinus_excelsior_ash_000195570.1
gnl_Sesin_v1.0_Sesamum_indicumSIN_1018773
gnl_Mimgu_v2.0_Migut.L01287.1
EhaBSC8_h_c23495c3_g0_i2
LiPhGnB2_11913.4
LiPhGnB2_11913.2
LiPhGnB2_11913.1
LiPhGnB2_11913.3
gnl_Nicbe_v0.4.4_Nicotiana_benthamiana_S00008124g0003.1
asteridSolanaceae-BOLZ-2039509-Atropa_belladonna
gnl_Solly_iTAGv2.3_Solyc05g007950.2.1
gnl_Ipotr_Ipomea_trifida_000283.1_g00014.1
asterid-CPOC-2023186-Convolvulus_arvensis
gnl_Utrgi_v4.1_Scf00414.g17247.t1
gnl_Utrgi_v4.1_Scf00096.g8252.t1
gnl_Ipotr_Ipomea_trifida_000341.1_g00033.1
gnl_Ipotr_Ipomea_trifida_000140.1_g00018.1
gnl_Ipotr_Ipomea_trifida_000140.1_g00017.1
CchilensisOnMs_comp42841_c0_seq1
CrostrataOnAt_comp52503_c0_seq2
CobtusifloraSdl_DN8324_c0_g2_i2
CcampestrisOnAt_comp44410_c0_seq1
gnl_Cusca_v0.1_Cc_v0.1_Contig215225_30907.1
V
Cpent196021_cp73540_c2_seq3_3533p_f1
CobtusifloraSdl_DN8324_c0_g2_i3
CpentagonaSdl_DN4464_c0_g2_i1
CpentagonaSdl_DN4464_c0_g1_i1
CharperiSdl_DN2279_c0_g2_i1
gnl_Cusca_v0.1_Cc_v0.1_Contig36909_12735.1
CexaltataSeed_DN8757_c0_g1_i2
CexaltataSeed_DN8757_c0_g1_i1
CexaltataSdl_DN8425_c0_g2_i1
CeuropaeaSeeds_DN9303_c0_g2_i1
CeuropaeaSeeds_DN9303_c0_g1_i1
gnl_Cofca_Cc_coffee11_g12950
gnl_Fraex_ash_Fraxinus_excelsior_ash_000263640.1
gnl_Sesin_v1.0_Sesamum_indicumSIN_1018772
gnl_Mimgu_v2.0_Migut.L01288.1
EhaBSC8_h_c13678_c0_i3
EhaBSC8_h_c30130_c0_i3
SlHeBC4_p_c16219_g0_i1
gnl_Cucsa_v1.0_Cucsa.338810.1
gnl_STrac_v1.02_SCAf10c129G00240
LiPhGnB2_10077.1
gnl_Actch_v_gnl_kiwi_Achn285501
gnl_Ambtr_v1.0_evm_27.model.AmTr_v1.0_scaffold00010.471
gnl_Cucsa_v1.0_Cucsa.285050.1
gnl_Nelnu_v1.0_NNU_000831-RA
gnl_Nelnu_v1.0_NNU_008499-RA
gnl_Nelnu_v1.0_NNU_016125-RA
gnl_Frave_v1.1_mrna27675.1-v1.0-hybrid
gnl_Cofca_Cc_coffee05_g07530
Solanum_melongena_PUT-6684
asteridSolanaceae-BOLZ-2162366-Atropa_belladonna
gnl_Solly_iTAGv2.3_Solyc04g005640.2.1
gnl_Sesin_v1.0_Sesamum_indicumSIN_1018191
gnl_Sesin_v1.0_Sesamum_indicumSIN_1018190
gnl_Ipotr_Ipomea_trifida_000771.1_g00001.1
asterid-CPOC-2022363-Convolvulus_arvensis
gnl_Cofca_Cc_coffee11_g12960
gnl_Cofca_Cc_coffee11_g12970
gnl_Betvu_v1.1_Bv6_153280_hphz.t1
gnl_Amahy_v1.0_Amaranthus_hypochondriacus_015108
gnl_Betvu_v1.1_Bv6_153260_pxmn.t1
gnl_Betvu_v1.1_Bv6_153250_zsne.t1
gnl_Betvu_v1.1_Bv6_153240_kssh.t1
gnl_Amahy_v1.0_Amaranthus_hypochondriacus_015106
CchilensisOnMs_comp46685_c2_seq1
CobtusifloraSdl_DN26962_c0_g1_i1
gnl_Cusca_v0.1_Cc_v0.1_Contig227682_26308.1
top nr blast hit is beet with 63% identity, top nr hits are all from beet family
CrostrataOnAt_comp46117_c0_seq1
CpentagonaSdl_DN3533_c0_g1_i1
Cuscuta_pentagona_Ranjan_64477
CharperiOnAt_comp32723_c0_seq1
H
gnl_Betvu_v1.1_Bv6_153230_mtwr.t1
gnl_Amahy_v1.0_Amaranthus_hypochondriacus_015102
gnl_Amahy_v1.0_Amaranthus_hypochondriacus_017001
gnl_Betvu_v1.1_Bv6_153220_fcxt.t1
gnl_Amahy_v1.0_Amaranthus_hypochondriacus_017000
gnl_Amahy_v1.0_Amaranthus_hypochondriacus_015104
gnl_Prupe_v1.0_ppa011014m
gnl_Cucsa_v1.0_Cucsa.285040.1
gnlIPhavu_v1.0lPhvul.002G084500.1
gnl_Medtr_Mt4.0v1_Medtr5g041010.1
gnl_Medtr_Mt4.0v1_Medtr5g041095.1
gnl_Medtr_Mt4.0v1_Medtr5g041080.1
gnl_Medtr_Mt4.0v1_Medtr5g041040.1
gnl_Eucgr_v1.1_Eucgr.G02497.1
gnl_Citsi_v1.1_orange1.1g027258m
gnl_Theca_v1.1_Thecc1EG011699t1
Eutrema_salsugineum_10008594m
gnl_Capgr_v1.1_Capsella_grandiflora_3501s0079.1
gnl_Arath_TAIR10_AT1G14210.1
gnl_Arath_TAIR10_AT1G14220.1
gnl_Capgr_v1.1_Capsella_grandiflora_3501s0078.1
Eutrema_salsugineum_10008717m
gnl_Capgr_v1.1_Capsella_grandiflora_1150s0015.1
gnl_Arath_TAIR10_AT1G26820.1
gnlIManes_v4.1cassava4.1_030833m
gnl_Poptr_v3.0_Potri.008G086800.1
gnl_Poptr_v3.0_Potri.010G168600.1
gnl_Vitvi_Genoscope.12X_GSVIVT01019974001
gnl_Vitvi_Genoscope.12X_GSVIVT01010193001
gnl_Citsi_v1.1_orange1.1g026944m
gnl_Prupe_v1.0_ppa011026m
gnl_Eucgr_v1.1_Eucgr.G02499.1
gnl_Eucgr_v1.1_Eucgr.G02498.1
gnl_Musac_v1_GSMUA_Achr5T23330_001
gnl_Phypa_v3.3_Pp3c2_17290V3.1
gnl_Phypa_v3.3_Pp3c1_22510V3.1

Fig. S4.40_OrthoFinder866

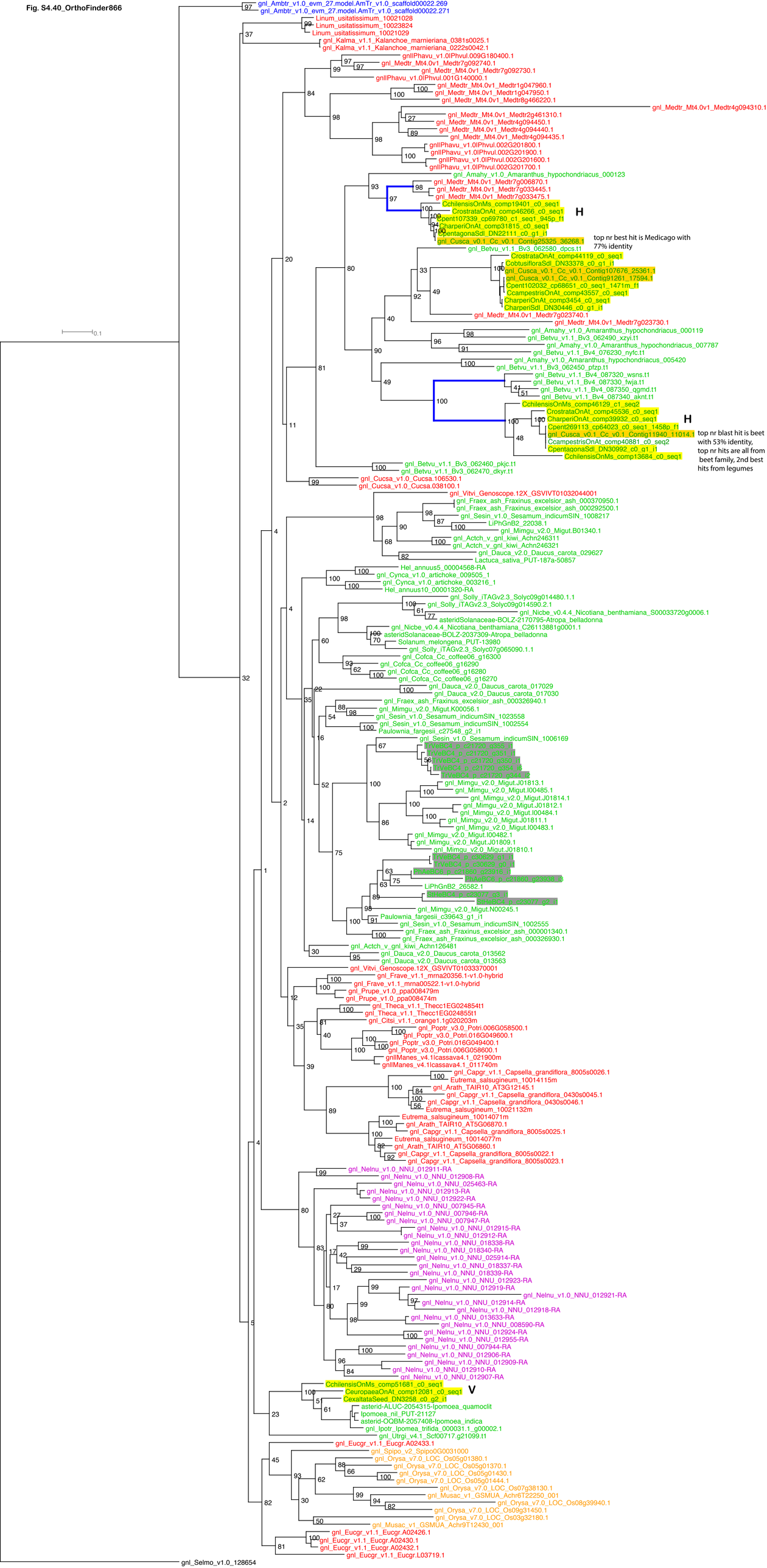


Fig. S4.41_OrthoFinder879

Fig. S4.42_OrthoFinder1016

gnl_Selmo_v1.0_121264
gnl_Selmo_v1.0_123124
gnl_Selmo_v1.0_426634
gnl_Selmo_v1.0_126716
gnl_Selmo_v1.0_93883
gnl_Nicbe_v0.4.4_Nicotiana_benthamiana_S00002876g0008.1
gnl_Selmo_v1.0_427043
gnl_Selmo_v1.0_448668
gnl_Selmo_v1.0_417150
gnl_Selmo_v1.0_406744
gnl_Selmo_v1.0_417153
gnl_Selmo_v1.0_444041
gnl_Selmo_v1.0_417154
gnl_Selmo_v1.0_404398
gnl_Capgr_v1.1_Capsella_grandiflora_1361s0026.1
gnl_Arath_TAIR10_AT1G78830.1
Eutrema_salsugineum_10018557m
gnl_Arath_TAIR10_AT1G78820.1
gnl_Capgr_v1.1_Capsella_grandiflora_1361s0025.1
gnl_Cucsa_v1.0_Cucsa.057580.1
gnl_Theca_v1.1_Thecc1EG031776t1
gnl_Cofca_Cc_coffee05_g11140
gnl_Cofca_Cc_coffee05_g11160
gnl_Cofca_Cc_coffee05_g11150
Wrightia_tinctoria_PUT-7038
gnl_Frave_v1.1_mrna27255.1-v1.0-hybrid
gnl_Prupe_v1.0_ppa005448m
gnl_Musac_v1_GSMUA_Achr6T14500_001
gnl_Spipo_v2_Spipo19G0008700
gnl_Spipo_v2_Spipo19G0008600
gnl_Spipo_v2_Spipo32G0009100
gnl_Spipo_v2_Spipo32G0009200
gnl_Spipo_v2_Spipo32G0009000
gnl_Spipo_v2_Spipo32G0008900
Linum_usitatissimum_10022495
Linum_usitatissimum_10000579
gnl_Eucgr_v1.1_Eucgr.F01234.1
gnl_Eucgr_v1.1_Eucgr.F01237.1
gnl_Eucgr_v1.1_Eucgr.F01235.1
gnl_Eucgr_v1.1_Eucgr.F01236.1
gnl_Eucgr_v1.1_Eucgr.F01233.1
gnl_Arath_TAIR10_AT1G16905.1
Eutrema_salsugineum_10007731m
Eutrema_salsugineum_10007630m
gnl_Arath_TAIR10_AT1G78860.1
gnl_Arath_TAIR10_AT1G78850.1
Eutrema_salsugineum_10018565m
gnl_Kalma_v1.1_Kalanchoe_marnieriana_1069s0007.1
gnl_Kalma_v1.1_Kalanchoe_marnieriana_0077s0043.1
gnl_Kalma_v1.1_Kalanchoe_marnieriana_0534s0025.1
gnl_Kalma_v1.1_Kalanchoe_marnieriana_1235s0008.1
gnl_Kalma_v1.1_Kalanchoe_marnieriana_1800s0001.1
gnl_Kalma_v1.1_Kalanchoe_marnieriana_0534s0024.1
gnl_Kalma_v1.1_Kalanchoe_marnieriana_0025s0145.1
gnl_Kalma_v1.1_Kalanchoe_marnieriana_0328s0001.1
gnl_Poptr_v3.0_Potri.011G110200.1
CchilensisOnMs_comp41502_c0_seq1
CrostrataOnAt_comp44685_c0_seq1
CcampestrisOnAt_comp177634_c0_seq1
Cuscuta_pentagona_Ranjan_21889
gnl_Cusca_v0.1_Cc_v0.1_Contig39005_40801.1
gnl_Poptr_v3.0_Potri.011G110000.1
gnl_Poptr_v3.0_Potri.011G110500.1
gnl_Poptr_v3.0_Potri.011G110300.1
gnl_Poptr_v3.0_Potri.001G391300.1
gnl_Poptr_v3.0_Potri.010G008900.1
gnl_Poptr_v3.0_Potri.010G005900.1
gnl_Poptr_v3.0_Potri.001G391200.1
gnl_Manes_v4.1_cassava4.1_033746m
gnl_Manes_v4.1_cassava4.1_022158m
gnl_Manes_v4.1_cassava4.1_026399m
gnl_Manes_v4.1_cassava4.1_008598m
gnl_Amahy_v1.0_Amaranthus_hypochondriacus_020055
gnl_Amahy_v1.0_Amaranthus_hypochondriacus_020056
gnl_Betvu_v1.1_Bv4_084810_xyqw.t1
gnl_Betvu_v1.1_Bv3_065550_cwep.t1
gnl_Vitvi_Genoscope.12X_GSVIVT01014205001
gnl_Theca_v1.1_Thecc1EG031775t1
gnl_Phavu_v1.0_Phvul.005G066000.1
gnl_Medtr_Mt4.0v1_Medtr2g076650.1
gnl_Medtr_Mt4.0v1_Medtr2g076490.1
gnl_Medtr_Mt4.0v1_Medtr2g076590.1
gnl_Medtr_Mt4.0v1_Medtr2g076610.1
gnl_Phavu_v1.0_Phvul.005G065700.1
gnl_Cucsa_v1.0_Cucsa.273790.1
gnl_Cucsa_v1.0_Cucsa.273780.1
gnl_Citsi_v1.1_orange1.1g036296m
gnl_Citsi_v1.1_orange1.1g013934m
gnl_Citsi_v1.1_orange1.1g047082m
gnl_Citsi_v1.1_orange1.1g048464m
gnl_Citsi_v1.1_orange1.1g041743m
gnl_Citsi_v1.1_orange1.1g018402m
gnl_Citsi_v1.1_orange1.1g043457m
gnl_Prupe_v1.0_ppa007630m
gnl_Frave_v1.1_mrna27254.1-v1.0-hybrid
gnl_Prupe_v1.0_ppa018303m
gnl_Frave_v1.1_mrna27249.1-v1.0-hybrid
gnl_Frave_v1.1_mrna27250.1-v1.0-hybrid
gnl_Frave_v1.1_mrna27251.1-v1.0-hybrid
gnl_Prupe_v1.0_ppa018756m
gnl_Prupe_v1.0_ppa007720m
gnl_Prupe_v1.0_ppa022988m
gnl_Frave_v1.1_mrna27253.1-v1.0-hybrid
gnl_Dauca_v2.0_Daucus_carota_007947
gnl_Dauca_v2.0_Daucus_carota_007948
gnl_Dauca_v2.0_Daucus_carota_017168
gnl_Nicbe_v0.4.4_Nicotiana_benthamiana_S00011507g0001.1
gnl_Nicbe_v0.4.4_Nicotiana_benthamiana_S00011507g0002.1
Solanum_melongena_PUT-11848
gnl_Solly_iTAGv2.3_Solyc07g062480.1.1
gnl_Solly_iTAGv2.3_Solyc07g062490.1.1
asteridSolanaceae-BOLZ-2039098-Atropa_belladonna
asterid-CPOC-2012270-Convolvulus_arvensis
gnl_Ipotr_Ipomea_trifida_002983.1_g00002.1
gnl_Ipotr_Ipomea_trifida_001493.1_g00002.1
asterid-ALUC-2007240-Ipomoea_quamoclit
asterid-OQBM-2057012-Ipomoea_indica
Wrightia_tinctoria_PUT-3122
gnl_Cofca_Cc_coffee07_g15430
gnl_Fraex_ash_Fraxinus_excelsior_ash_000367920.1
gnl_Sesin_v1.0_Sesamum_indicumSIN_1022545
gnl_Sesin_v1.0_Sesamum_indicumSIN_1022546
TrVeBC4_p_c35642_g2_i8
TrVeBC4_p_c35642_g0_i1
PhAeBC6_p_c18952_g2_i1
StHeBC4_p_c12903_g473_i1
gnl_Mimgu_v2.0_Migut.M00733.1
gnl_Cynca_v1.0_artichoke_011110_1
Lactuca_sativa_PUT-187a-30765
Lactuca_sativa_PUT-187a-30764
Lactuca_sativa_PUT-187a-35659
Lactuca_sativa_PUT-187a-23329
Hel_annuus10_00001701-RA
gnl_Kalma_v1.1_Kalanchoe_marnieriana_0375s0043.1
gnl_Kalma_v1.1_Kalanchoe_marnieriana_0605s0003.1
gnl_Nelnu_v1.0_NNU_021575-RA
gnl_Nelnu_v1.0_NNU_011587-RA
gnl_Nelnu_v1.0_NNU_021577-RA
gnl_Nelnu_v1.0_NNU_021576-RA
gnl_Poptr_v3.0_Potri.011G066200.1
gnl_Theca_v1.1_Thecc1EG029697t1
gnl_Actch_v_gnl_kiwi_Achn125011
gnl_Actch_v_gnl_kiwi_Achn182481
gnl_Solly_iTAGv2.3_Solyc02g076830.1.1
gnl_Fraex_ash_Fraxinus_excelsior_ash_000186500.1
gnl_Mimgu_v2.0_Migut.H01432.1
gnl_Mimgu_v2.0_Migut.H01431.1
gnl_Dauca_v2.0_Daucus_carota_027998
gnl_Dauca_v2.0_Daucus_carota_027999
gnl_Dauca_v2.0_Daucus_carota_027997

H

74% identity with Populus, which is the top nr blast hit

0.1

gnl_Phypa_v3.3_Pp3c8_4920V3.1
gnl_Phypa_v3.3_Pp3c8_4810V3.1
gnl_Phypa_v3.3_Pp3c22_22820V3.1
gnl_Phypa_v3.3_Pp3c21_15660V3.1

Fig. S4.43_OrthoFinder1033

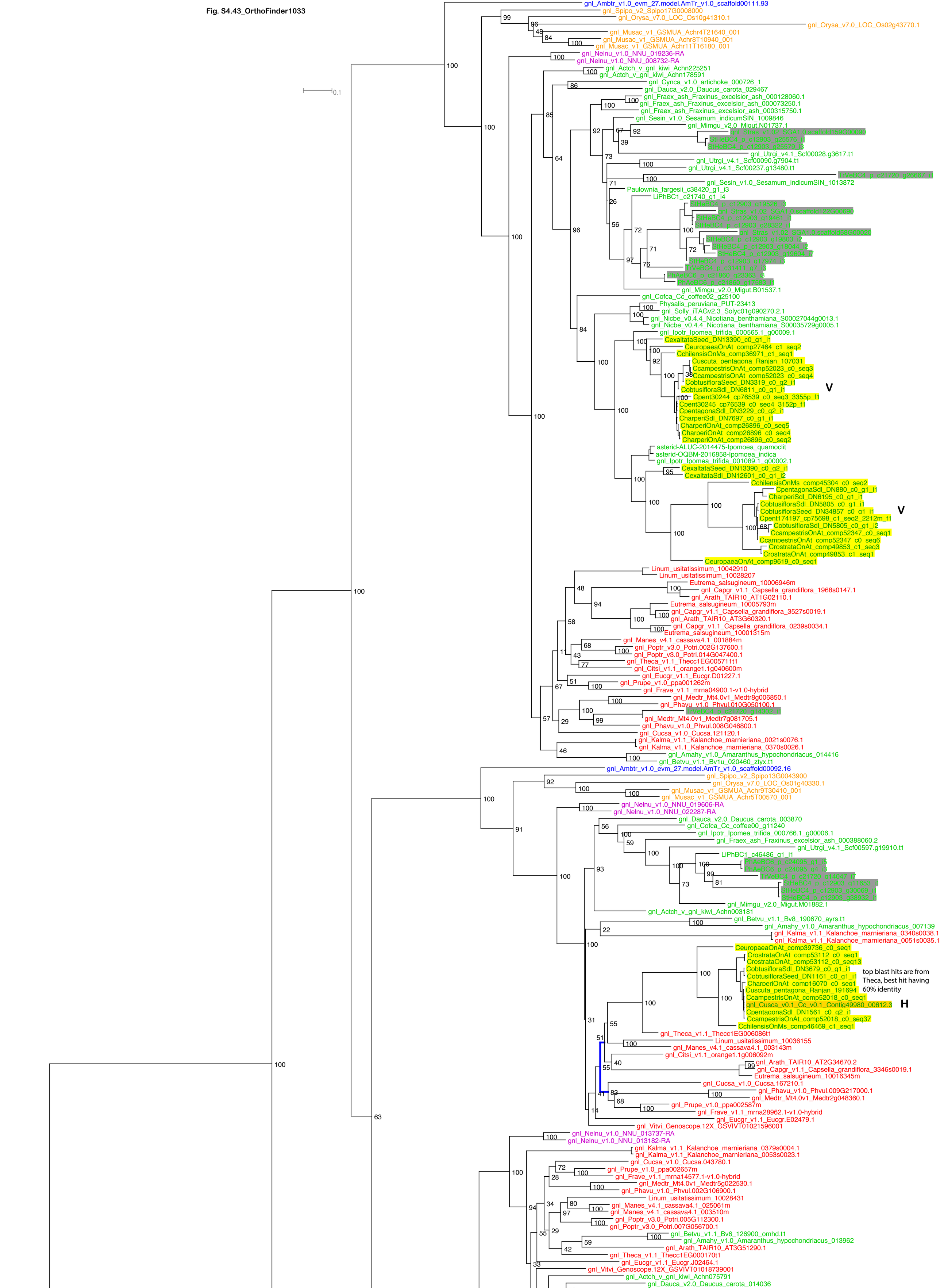
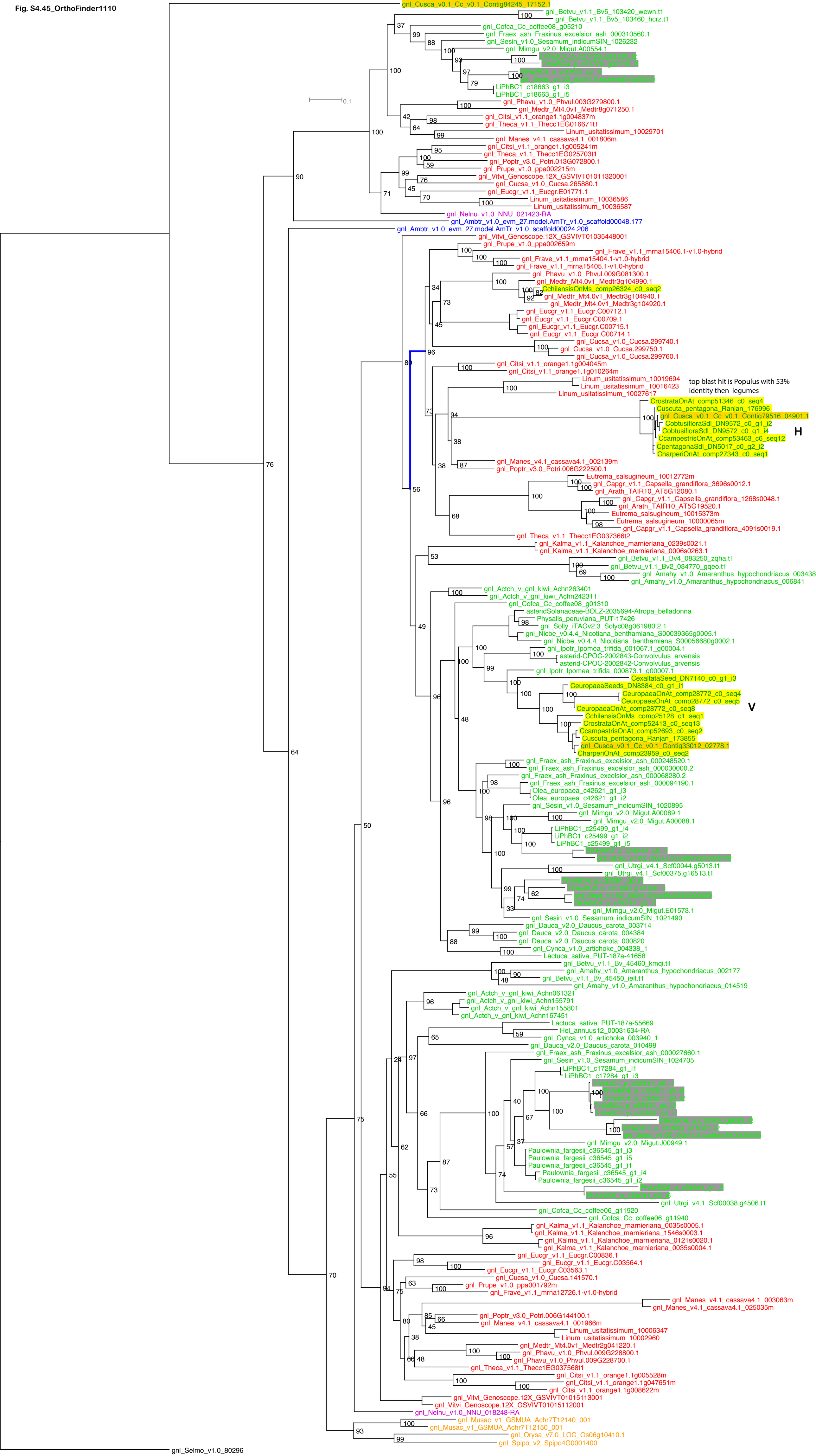


Fig. S4.44_OrthoFinder1036
0.1
gnl_Selmo_v1.0_230384
gnl_Selmo_v1.0_142651
gnl_Orysa_v7.0_LOC_Os10g06720.1
gnl_Ambtr_v1.0_evm_27.model.AmTr_v1.0_scaffold00010.52
Linum_usitatissimum_10000452
Linum_usitatissimum_10010976
gnl_Manes_v4.1_cassava4.1_010142m
gnl_Poptr_v3.0_Potri.017G129300.1
gnl_Citsi_v1.1_orange1.1g021840m
gnl_Kalma_v1.1_Kalanchoe_marnieriana_0012s0073.1
gnl_Kalma_v1.1_Kalanchoe_marnieriana_0622s0022.1
gnl_Arath_TAIR10_AT3G17940.1
gnl_Capgr_v1.1_Capsella_grandiflora_0456s0013.1
Eutrema_salsugineum_10021070m
gnl_Vitvi_Genoscope.12X_GSVIVT01008450001
gnl_Cucsa_v1.0_Cucsa.111620.1
gnl_Medtr_Mt4.0v1_Medtr6g069630.1
gnl_Phavu_v1.0_Phvul.004G150200.1
gnl_Prupe_v1.0_ppa008258m
gnl_Frave_v1.1_mrna09368.1-v1.0-hybrid
Linum_usitatissimum_10026181
gnl_Eucgr_v1.1_Eucgr.B00995.1
gnl_Citsi_v1.1_orange1.1g019518m
gnl_Manes_v4.1_cassava4.1_011275m
gnl_Poptr_v3.0_Potri.006G037300.1
gnl_Poptr_v3.0_Potri.012G045900.1
gnl_Theca_v1.1_Thecc1EG012789t1
gnl_Amahy_v1.0_Amaranthus_hypochondriacus_015873
gnl_Betvu_v1.1_Bv5_117920_uayn.t1
Lactuca_sativa_PUT-187a-42475
gnl_Cynca_v1.0_artichoke_013795_1
gnl_Dauca_v2.0_Daucus_carota_028347
gnl_Solly_iTAGv2.3_Solyc03g118650.2.1
asteridSolanaceae-BOLZ-2017641-Atropa_belladonna
gnl_Nicbe_v0.4.4_Nicotiana_benthamiana_S00041476g0013.1
gnl_Nicbe_v0.4.4_Nicotiana_benthamiana_S00055573g0007.1
CeuropaeaOnAt_comp31215_c0_seq1
CchilensisOnMs_comp42871_c0_seq1
CrostrataOnAt_comp51303_c0_seq1
CobtusifloraSdl_DN4411_c0_g1_i1
gnl_Cusca_v0.1_Cc_v0.1_Contig7530_26096.1
CpentagonaSdl_DN324_c0_g1_i1
CcampestrisOnAt_comp47820_c0_seq3
Cpent97847_cp69100_c0_seq1_1763p_f1
CharperiOnAt_comp31417_c0_seq1
gnl_Cusca_v0.1_Cc_v0.1_Contig174019_08675.1
CexaltataSeed_DN16903_c0_g5_i3
CexaltataSeed_DN16903_c0_g5_i4
asterid-CPOC-2021112-Convolvulus_arvensis
asterid-OQBM-2003138-Ipomoea_indica
Ipomoea_nil_PUT-1623590
gnl_Ipotr_Ipomea_trifida_001218.1_g00007.1
asterid-ALUC-2053805-Ipomoea_quamoclit
asterid-CPOC-2022892-Convolvulus_arvensis
gnl_Ipotr_Ipomea_trifida_001538.1_g00016.1
Ipomoea_nil_PUT-17626
asterid-OQBM-2005713-Ipomoea_indica
gnl_Fraex_ash_Fraxinus_excelsior_ash_000300280.1
Olea_europaea_c42676_g1_i1
gnl_Sesin_v1.0_Sesamum_indicumSIN_1017324
gnl_Utrgi_v4.1_Scf01278.g24386.t1
LiPhBC1_c55666_g1_i1
SlrheBC4_p_c25599_g2_i1
SlrheBC4_p_c25599_g1_i1
SlrheBC4_p_c25599_g3_i1
SlrheBC4_p_c25599_g2_i2
gnl_Cusca_v0.1_Cc_v0.1_Contig16277_03010
LiVeBC04_p_c35279_g3_i3
LiVeBC04_p_c35279_g2_i2
LiVeBC04_p_c35279_g1_i1
gnl_Mimgu_v2.0_Migut.D01501.1
gnl_Mimgu_v2.0_Migut.O00772.1
Paulownia_fargesii_c37991_g1_i3
LiPhBC1_c3047_g1_i1
Paulownia_fargesii_c37991_g1_i1
Wrightia_tinctoria_PUT-6050
gnl_Cofca_Cc_coffee04_g06190
gnl_Nelnu_v1.0_NNU_018818-RA
gnl_Nelnu_v1.0_NNU_000169-RA
gnl_Musac_v1_GSMUA_Achr9T11650_001
gnl_Musac_v1_GSMUA_Achr6T21810_001
gnl_Kalma_v1.1_Kalanchoe_marnieriana_0020s0110.1
gnl_Kalma_v1.1_Kalanchoe_marnieriana_0248s0049.1
gnl_Kalma_v1.1_Kalanchoe_marnieriana_0047s0032.1
gnl_Kalma_v1.1_Kalanchoe_marnieriana_0085s0049.1
Eutrema_salsugineum_10010502m
gnl_Arath_TAIR10_AT3G47800.1
gnl_Capgr_v1.1_Capsella_grandiflora_13768s0001.1
gnl_Phavu_v1.0_Phvul.003G191500.1
gnl_Medtr_Mt4.0v1_Medtr4g108260.1
Linum_usitatissimum_10023611
gnl_Vitvi_Genoscope.12X_GSVIVT01008039001
gnl_Actch_v_gnl_kiwi_Achn137721
gnl_Cofca_Cc_coffee04_g17190
gnl_Nicbe_v0.4.4_Nicotiana_benthamiana_S00049495g0016.1
gnl_Nicbe_v0.4.4_Nicotiana_benthamiana_S00003615g0014.1
asteridSolanaceae-BOLZ-2038340-Atropa_belladonna
gnl_Solly_iTAGv2.3_Solyc03g113030.2.1
CeuropaeaSeeds_DN33834_c0_g1_i1
CchilensisOnMs_comp48496_c0_seq6
CrostrataOnAt_comp46200_c1_seq14
CrostrataOnAt_comp46200_c1_seq9
CcampestrisOnAt_comp52920_c0_seq9
CcampestrisOnAt_comp52920_c0_seq8
CobtusifloraSdl_DN21115_c0_g1_i1
CcampestrisOnAt_comp52920_c0_seq42
gnl_Cusca_v0.1_Cc_v0.1_Contig16477_13699.1
Cpent101215_cp68694_c0_seq6_1414p_f1
CpentagonaSdl_DN5918_c0_g3_i1
gnl_Cusca_v0.1_Cc_v0.1_Contig94077_04842.1
CharperiOnAt_comp23875_c0_seq2
CeuropaeaOnAt_comp34547_c0_seq1
CexaltataSdl_DN23036_c0_g1_i1
CchilensisOnMs_comp52091_c2_seq1
CchilensisOnMs_comp52091_c2_seq3
CrostrataOnAt_comp47574_c0_seq1
gnl_Cusca_v0.1_Cc_v0.1_Contig89877_24026.1
CharperiOnAt_comp9180_c0_seq1
CpentagonaSdl_DN8224_c0_g1_i1
gnl_Cusca_v0.1_Cc_v0.1_Contig61630_30379.1
asterid-CPOC-2108607-Convolvulus_arvensis
gnl_Ipotr_Ipomea_trifida_000115.1_g00004.1
asterid-ALUC-2054295-Ipomoea_quamoclit
Ipomoea_nil_PUT-19653
asterid-OQBM-2016984-Ipomoea_indica
gnl_Fraex_ash_Fraxinus_excelsior_ash_000068340.1
LiPhBC1_c10168_g1_i2
LiPhBC1_c10168_g1_i3
LiPhBC1_c10168_g1_i1
SlrheBC4_p_c23532_g2_i1
SlrheBC4_p_c21360_g2_i1
SlrheBC4_p_c21360_g2_i2
SlrheBC4_p_c21360_g2_i3
LiVeBC01_c_c20101_g2_i1
LiVeBC04_p_c37101_g1_i1
gnl_Mimgu_v2.0_Migut.I00151.1
gnl_Sesin_v1.0_Sesamum_indicumSIN_1016387
gnl_Utrgi_v4.1_Scf02076.g25623.t1
gnl_Dauca_v2.0_Daucus_carota_026057
gnl_Dauca_v2.0_Daucus_carota_026068
gnl_Prupe_v1.0_ppa007822m
gnl_Citsi_v1.1_orange1.1g043310m
gnl_Theca_v1.1_Thecc1EG013882t1
gnl_Theca_v1.1_Thecc1EG013886t1
gnl_Manes_v4.1_cassava4.1_025611m
gnl_Poptr_v3.0_Potri.015G130400.1
gnl_Poptr_v3.0_Potri.012G128800.1
gnl_Eucgr_v1.1_Eucgr.B00459.1
gnl_Cucsa_v1.0_Cucsa.197590.1
gnl_Nelnu_v1.0_NNU_022882-RA
gnl_Nelnu_v1.0_NNU_000779-RA
gnl_Nelnu_v1.0_NNU_007138-RA
gnl_Amahy_v1.0_Amaranthus_hypochondriacus_015176
gnl_Kalma_v1.1_Kalanchoe_marnieriana_0522s0020.1
gnl_Kalma_v1.1_Kalanchoe_marnieriana_0328s0006.1
gnl_Vitvi_Genoscope.12X_GSVIVT01011365001
gnl_Theca_v1.1_Thecc1EG045874t1
gnl_Theca_v1.1_Thecc1EG018410t1
Eutrema_salsugineum_10013324m
gnl_Arath_TAIR10_AT5G15140.1
gnl_Capgr_v1.1_Capsella_grandiflora_10677s0001.1
gnl_Manes_v4.1_cassava4.1_024114m
gnl_Cusca_v0.1_Cc_v0.1_Contig217765_24560.1
gnl_Cusca_v0.1_Cc_v0.1_Contig11014_20286.1
Cpent203460_cp72524_c1_seq1_1290x_f1
top blast hit is Ricinus with 58% and 75% identity
gnl_Poptr_v3.0_Potri.017G080000.1
gnl_Citsi_v1.1_orange1.1g047922m
gnl_Citsi_v1.1_orange1.1g017992m
gnl_Eucgr_v1.1_Eucgr.J01219.1
gnl_Manes_v4.1_cassava4.1_023807m
Linum_usitatissimum_10030673
Linum_usitatissimum_10005251
Linum_usitatissimum_10007251
Linum_usitatissimum_10015365
gnl_Poptr_v3.0_Potri.017G080100.1
gnl_Poptr_v3.0_Potri.017G080200.1
gnl_Poptr_v3.0_Potri.004G129700.1
gnl_Prupe_v1.0_ppa020267m
gnl_Phavu_v1.0_Phvul.008G042600.1
gnl_Medtr_Mt4.0v1_Medtr7g030930.1
gnl_Phavu_v1.0_Phvul.004G027000.1
gnl_Medtr_Mt4.0v1_Medtr6g011560.1
gnl_Medtr_Mt4.0v1_Medtr6g011550.2
gnl_Cucsa_v1.0_Cucsa.339020.1
gnl_Frave_v1.1_mrna01252.1-v1.0-hybrid
gnl_Prupe_v1.0_ppa024124m
gnl_Dauca_v2.0_Daucus_carota_006723
gnl_Cynca_v1.0_artichoke_005240_1
Lactuca_sativa_PUT-187a-28842
Hel_annuus15_00039591-RA
Hel_annuus9_00013173-RA
Hel_annuus5_00005450-RA
gnl_Nicbe_v0.4.4_Nicotiana_benthamiana_S00022542g0013.1
gnl_Nicbe_v0.4.4_Nicotiana_benthamiana_S00000843g0011.1
Solanum_melongena_PUT-16413
gnl_Solly_iTAGv2.3_Solyc02g087810.2.1
gnl_Nicbe_v0.4.4_Nicotiana_benthamiana_S00023162g0005.1
gnl_Solly_iTAGv2.3_Solyc02g087790.1.1
asteridSolanaceae-BOLZ-2017358-Atropa_belladonna
Solanum_melongena_PUT-9429
gnl_Solly_iTAGv2.3_Solyc02g087800.2.1
gnl_Nicbe_v0.4.4_Nicotiana_benthamiana_S00028042g0005.1
gnl_Nicbe_v0.4.4_Nicotiana_benthamiana_S00016602g0016.1
Physalis_peruviana_PUT-9283
gnl_Solly_iTAGv2.3_Solyc02g087770.2.1
asteridSolanaceae-BOLZ-2017359-Atropa_belladonna
asteridSolanaceae-BOLZ-2017357-Atropa_belladonna
Solanum_melongena_PUT-3139
gnl_Solly_iTAGv2.3_Solyc02g087780.2.1
CeuropaeaOnAt_comp35285_c0_seq1
CeuropaeaOnAt_comp34822_c0_seq1
CchilensisOnMs_comp17219_c0_seq1
gnl_Ipotr_Ipomea_trifida_000807.1_g00006.1
asterid-ALUC-2052793-Ipomoea_quamoclit
Ipomoea_nil_PUT-11023589
asterid-OQBM-2011465-Ipomoea_indica
gnl_Ipotr_Ipomea_trifida_004012.1_g00002.1
asterid-ALUC-2011979-Ipomoea_quamoclit
gnl_Ipotr_Ipomea_trifida_001729.1_g00003.1
Ipomoea_nil_PUT-5337
Ipomoea_nil_PUT-22305
asterid-OQBM-2003448-Ipomoea_indica
asterid-OQBM-2003449-Ipomoea_indica
asterid-CPOC-2010402-Convolvulus_arvensis
asterid-CPOC-2010401-Convolvulus_arvensis
gnl_Ipotr_Ipomea_trifida_000807.1_g00007.1
gnl_Cofca_Cc_coffee00_g06000
gnl_Cofca_Cc_coffee11_g04810
gnl_Cofca_Cc_coffee07_g03170
gnl_Utrgi_v4.1_Scf00018.g2598.t1
gnl_Strae_v1.0_Scaf00420g00080
gnl_Strae_v1.0_Scaf00420g00083
gnl_Mimgu_v2.0_Migut.H00902.1
gnl_Fraex_ash_Fraxinus_excelsior_ash_000245490.1
gnl_Fraex_ash_Fraxinus_excelsior_ash_000273440.1
gnl_Musac_v1_GSMUA_Achr5T23370_001
gnl_Spipo_v2_Spipo15G0002900
gnl_Orysa_v7.0_LOC_Os02g36600.1
gnl_Orysa_v7.0_LOC_Os04g38530.1
gnl_Orysa_v7.0_LOC_Os04g38540.1
gnl_Orysa_v7.0_LOC_Os09g26430.1
gnl_Ambtr_v1.0_evm_27.model.AmTr_v1.0_scaffold00010.354
gnl_Phypa_v3.3_Pp3c10_12280V3.1
V
V
H

Fig. S4.45_OrthoFinder1110



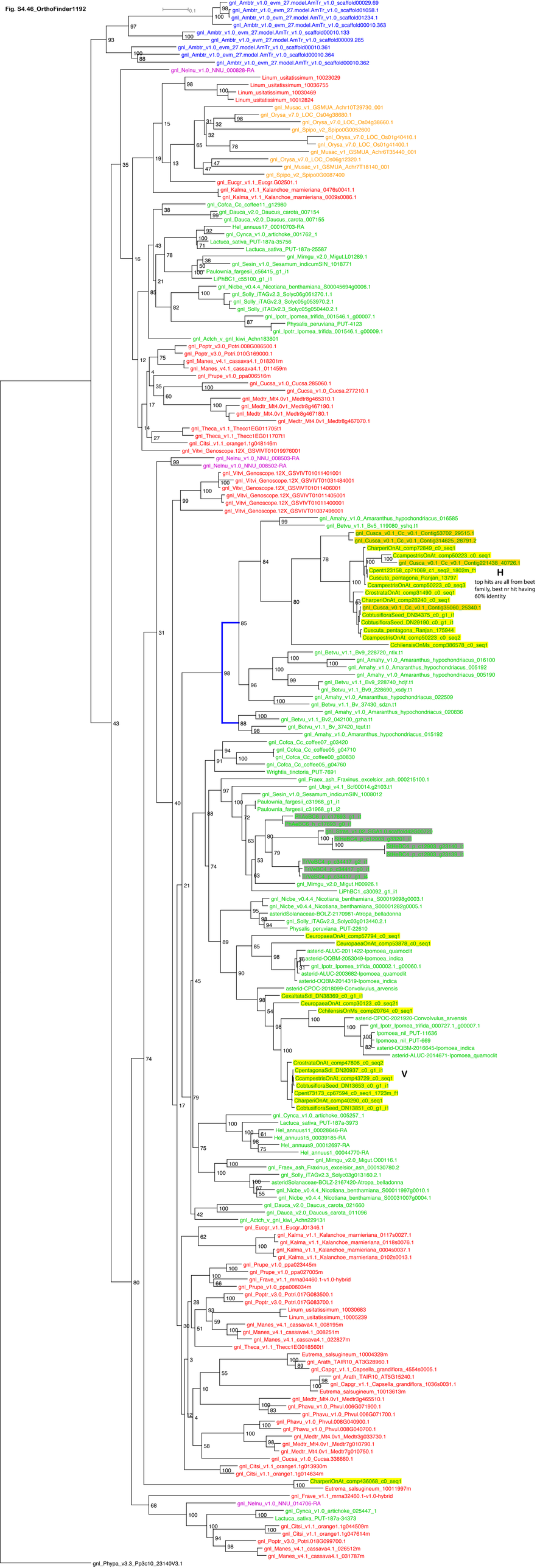


Fig. S4.46_OrthoFinder1192
0.1
gnl_Ambtr_v1.0_evm_27.model.AmTr_v1.0_scaffold00029.69
gnl_Ambtr_v1.0_evm_27.model.AmTr_v1.0_scaffold01058.1
gnl_Ambtr_v1.0_evm_27.model.AmTr_v1.0_scaffold01234.1
gnl_Ambtr_v1.0_evm_27.model.AmTr_v1.0_scaffold00010.363
gnl_Ambtr_v1.0_evm_27.model.AmTr_v1.0_scaffold00010.133
gnl_Ambtr_v1.0_evm_27.model.AmTr_v1.0_scaffold00009.285
gnl_Ambtr_v1.0_evm_27.model.AmTr_v1.0_scaffold00010.361
gnl_Ambtr_v1.0_evm_27.model.AmTr_v1.0_scaffold00010.364
gnl_Ambtr_v1.0_evm_27.model.AmTr_v1.0_scaffold00010.362
gnl_Nelnu_v1.0_NNU_000828-RA
Linum_usitatissimum_10023029
Linum_usitatissimum_10096755
Linum_usitatissimum_10030469
Linum_usitatissimum_10012824
gnl_Musac_v1_GSMUA_Achr10T29730_001
gnl_Orysa_v7.0_LOC_Os04g38680.1
gnl_Orysa_v7.0_LOC_Os04g38660.1
gnl_Spipo_v2_Spipo0G0052600
gnl_Orysa_v7.0_LOC_Os01g40410.1
gnl_Orysa_v7.0_LOC_Os01g41400.1
gnl_Musac_v1_GSMUA_Achr6T35440_001
gnl_Orysa_v7.0_LOC_Os06g12320.1
gnl_Musac_v1_GSMUA_Achr7T18140_001
gnl_Spipo_v2_Spipo0G0087400
gnl_Eucgr_v1.1_Eucgr.G02501.1
gnl_Kalma_v1.1_Kalanchoe_marnieriana_0476s0041.1
gnl_Kalma_v1.1_Kalanchoe_marnieriana_0009s0086.1
gnl_Cofca_Cc_coffee11_g12980
gnl_Dauca_v2.0_Daucus_carota_007154
gnl_Dauca_v2.0_Daucus_carota_007155
Hel_annuus17_00010703-RA
gnl_Cynca_v1.0_artichoke_001762_1
Lactuca_sativa_PUT-187a-35756
Lactuca_sativa_PUT-187a-25587
gnl_Mimgu_v2.0_Migut.L01289.1
gnl_Sesin_v1.0_Sesamum_indicumSIN_1018771
Paulownia_fargesii_c56415_g1_i1
LiPhBC1_c55100_g1_i1
gnl_Nicbe_v0.4.4_Nicotiana_benthamiana_S00045694g0006.1
gnl_Solly_iTAGv2.3_Solyc06g061270.1.1
gnl_Solly_iTAGv2.3_Solyc05g053970.2.1
gnl_Solly_iTAGv2.3_Solyc05g050440.2.1
gnl_Ipotr_Ipomea_trifida_001546.1_g00007.1
Physalis_peruviana_PUT-4123
gnl_Ipotr_Ipomea_trifida_001546.1_g00009.1
gnl_Actch_v_gnl_kiwi_Achn183801
gnl_Poptr_v3.0_Potri.008G086500.1
gnl_Poptr_v3.0_Potri.010G169000.1
gnl_Manes_v4.1_cassava4.1_018201m
gnl_Manes_v4.1_cassava4.1_011459m
gnl_Prupe_v1.0_ppa006516m
gnl_Cucsa_v1.0_Cucsa.285060.1
gnl_Cucsa_v1.0_Cucsa.277210.1
gnl_Medtr_Mt4.0v1_Medtr8g465310.1
gnl_Medtr_Mt4.0v1_Medtr8g467190.1
gnl_Medtr_Mt4.0v1_Medtr8g467180.1
gnl_Medtr_Mt4.0v1_Medtr8g467070.1
gnl_Theca_v1.1_Thecc1EG011705t1
gnl_Theca_v1.1_Thecc1EG011707t1
gnl_Citsi_v1.1_orange1.1g048146m
gnl_Vitvi_Genoscope.12X_GSVIVT01019976001
gnl_Nelnu_v1.0_NNU_008503-RA
gnl_Nelnu_v1.0_NNU_008502-RA
gnl_Vitvi_Genoscope.12X_GSVIVT01011401001
gnl_Vitvi_Genoscope.12X_GSVIVT01031484001
gnl_Vitvi_Genoscope.12X_GSVIVT01011406001
gnl_Vitvi_Genoscope.12X_GSVIVT01011405001
gnl_Vitvi_Genoscope.12X_GSVIVT01011400001
gnl_Vitvi_Genoscope.12X_GSVIVT01037496001
gnl_Amahy_v1.0_Amaranthus_hypochondriacus_016585
gnl_Betvu_v1.1_Bv5_119080_yshq.t1
gnl_Cusca_v0.1_Cc_v0.1_Contig537022_29515.1
gnl_Cusca_v0.1_Cc_v0.1_Contig314625_28791.2
CharperiOnAt_comp72849_c0_seq1
CcampestrisOnAt_comp50223_c0_seq1
gnl_Cusca_v0.1_Cc_v0.1_Contig221438_40726.1
Cpent123158_cp71069_c1_seq2_1802m_f1
Cuscuta_pentagona_Ranjan_13797
CcampestrisOnAt_comp50223_c0_seq3
CrostrataOnAt_comp31490_c0_seq1
CharperiOnAt_comp28240_c0_seq1
gnl_Cusca_v0.1_Cc_v0.1_Contig35060_25340.1
CobtusifloraSeed_DN34375_c0_g1_i1
CobtusifloraSeed_DN29190_c0_g1_i1
Cuscuta_pentagona_Ranjan_175944
CcampestrisOnAt_comp50223_c0_seq2
CchilensisOnMs_comp386578_c0_seq1
H
top hits are all from beet family, best nr hit having 60% identity
gnl_Betvu_v1.1_Bv9_228720_ntix.t1
gnl_Amahy_v1.0_Amaranthus_hypochondriacus_016100
gnl_Amahy_v1.0_Amaranthus_hypochondriacus_005192
gnl_Amahy_v1.0_Amaranthus_hypochondriacus_005190
gnl_Betvu_v1.1_Bv9_228740_hdjf.t1
gnl_Betvu_v1.1_Bv9_228690_xsdy.t1
gnl_Amahy_v1.0_Amaranthus_hypochondriacus_022509
gnl_Betvu_v1.1_Bv_37430_sdzn.t1
gnl_Amahy_v1.0_Amaranthus_hypochondriacus_020836
gnl_Betvu_v1.1_Bv2_042100_gzha.t1
gnl_Betvu_v1.1_Bv_37420_tquf.t1
gnl_Amahy_v1.0_Amaranthus_hypochondriacus_015192
gnl_Cofca_Cc_coffee07_g03420
gnl_Cofca_Cc_coffee05_g04710
gnl_Cofca_Cc_coffee00_g03830
gnl_Cofca_Cc_coffee05_g04760
Wrightia_tinctoria_PUT-7691
gnl_Fraex_ash_Fraxinus_excelsior_ash_000215100.1
gnl_Utrgi_v4.1_Scf00014.g2103.t1
gnl_Sesin_v1.0_Sesamum_indicumSIN_1008012
Paulownia_fargesii_c31968_g1_i1
Paulownia_fargesii_c31968_g1_i2
PaWabCP_p_c31968_g2_i1
PaWabCP_p_c31968_g3_i1
gnl_Strau_v1.02_StrAV10scaffold02620726
StrauCP_p_c12803_g3_i1
StrauCP_p_c12803_g2_i1
StrauCP_p_c12803_g3_i1
StrauCP_p_c12803_g2_i2
PaWabCP_p_c53417_g2_i1
PaWabCP_p_c54497_g1_i1
PaWabCP_p_c54497_g1_i2
gnl_Mimgu_v2.0_Migut.H00926.1
LiPhBC1_c30092_g1_i1
gnl_Nicbe_v0.4.4_Nicotiana_benthamiana_S00019698g0003.1
gnl_Nicbe_v0.4.4_Nicotiana_benthamiana_S00001282g0005.1
asteridSolanaceae-BOLZ-2170981-Atropa_belladonna
gnl_Solly_iTAGv2.3_Solyc03g013440.2.1
Physalis_peruviana_PUT-22610
CeuropaeaOnAt_comp57794_c0_seq1
CeuropaeaOnAt_comp53878_c0_seq1
asterid-ALUC-2011422-Ipomoea_quamoclit
asterid-OQBM-2053049-Ipomoea_indica
gnl_Ipotr_Ipomea_trifida_000002.1_g00060.1
asterid-ALUC-2003682-Ipomoea_quamoclit
asterid-OQBM-2014319-Ipomoea_indica
asterid-CPOC-2018099-Convolvulus_arvensis
CexaltataSdl_DN38369_c0_g1_i1
CeuropaeaOnAt_comp30123_c0_seq21
CchilensisOnMs_comp20764_c0_seq1
asterid-CPOC-2021920-Convolvulus_arvensis
gnl_Ipotr_Ipomea_trifida_000727.1_g00007.1
Ipomoea_nil_PUT-11636
Ipomoea_nil_PUT-669
asterid-OQBM-2016645-Ipomoea_indica
asterid-ALUC-2014671-Ipomoea_quamoclit
CrostrataOnAt_comp47806_c0_seq2
CpentagonaSdl_DN20937_c0_g1_i1
CcampestrisOnAt_comp43729_c0_seq1
CobtusifloraSeed_DN13653_c0_g1_i1
Cpent73173_cp67594_c0_seq1_1723m_f1
CharperiOnAt_comp40290_c0_seq1
CobtusifloraSeed_DN13851_c0_g1_i1
V
gnl_Cynca_v1.0_artichoke_005257_1
Lactuca_sativa_PUT-187a-3973
Hel_annuus11_00028646-RA
Hel_annuus15_00039185-RA
Hel_annuus9_00012697-RA
Hel_annuus1_00044770-RA
gnl_Mimgu_v2.0_Migut.O00116.1
gnl_Fraex_ash_Fraxinus_excelsior_ash_000130780.2
gnl_Solly_iTAGv2.3_Solyc03g013160.2.1
asteridSolanaceae-BOLZ-2167420-Atropa_belladonna
gnl_Nicbe_v0.4.4_Nicotiana_benthamiana_S00011997g0010.1
gnl_Nicbe_v0.4.4_Nicotiana_benthamiana_S00031007g0004.1
gnl_Dauca_v2.0_Daucus_carota_021660
gnl_Dauca_v2.0_Daucus_carota_011096
gnl_Actch_v_gnl_kiwi_Achn229131
gnl_Eucgr_v1.1_Eucgr.J01346.1
gnl_Kalma_v1.1_Kalanchoe_marnieriana_0117s0027.1
gnl_Kalma_v1.1_Kalanchoe_marnieriana_0118s0076.1
gnl_Kalma_v1.1_Kalanchoe_marnieriana_0004s0037.1
gnl_Kalma_v1.1_Kalanchoe_marnieriana_0102s0013.1
gnl_Prupe_v1.0_ppa023445m
gnl_Prupe_v1.0_ppa027005m
gnl_Frave_v1.1_mrna04460.1-v1.0-hybrid
gnl_Prupe_v1.0_ppa006034m
gnl_Poptr_v3.0_Potri.017G083500.1
gnl_Poptr_v3.0_Potri.017G083700.1
Linum_usitatissimum_10030683
Linum_usitatissimum_10005239
gnl_Manes_v4.1_cassava4.1_008195m
gnl_Manes_v4.1_cassava4.1_008251m
gnl_Manes_v4.1_cassava4.1_022827m
gnl_Theca_v1.1_Thecc1EG018560t1
Eutrema_salsugineum_10004328m
gnl_Arath_TAIR10_AT3G28960.1
gnl_Capgr_v1.1_Capsella_grandiflora_4554s0005.1
gnl_Arath_TAIR10_AT5G15240.1
gnl_Capgr_v1.1_Capsella_grandiflora_1036s0031.1
Eutrema_salsugineum_10013613m
gnl_Medtr_Mt4.0v1_Medtr3g465510.1
gnl_Phavu_v1.0_Phvul.006G071900.1
gnl_Phavu_v1.0_Phvul.006G071700.1
gnl_Phavu_v1.0_Phvul.008G040900.1
gnl_Phavu_v1.0_Phvul.008G040700.1
gnl_Medtr_Mt4.0v1_Medtr3g033730.1
gnl_Medtr_Mt4.0v1_Medtr7g010790.1
gnl_Medtr_Mt4.0v1_Medtr7g010750.1
gnl_Cucsa_v1.0_Cucsa.338880.1
gnl_Citsi_v1.1_orange1.1g013930m
gnl_Citsi_v1.1_orange1.1g014634m
CharperiOnAt_comp436068_c0_seq1
Eutrema_salsugineum_10011997m
gnl_Frave_v1.1_mrna32460.1-v1.0-hybrid
gnl_Nelnu_v1.0_NNU_014706-RA
gnl_Cynca_v1.0_artichoke_025447_1
Lactuca_sativa_PUT-187a-34373
gnl_Citsi_v1.1_orange1.1g044509m
gnl_Citsi_v1.1_orange1.1g047614m
gnl_Poptr_v3.0_Potri.018G099700.1
gnl_Manes_v4.1_cassava4.1_026512m
gnl_Manes_v4.1_cassava4.1_031787m
gnl_Phypa_v3.3_Pp3c10_23140V3.1

Fig. S4.47_OrthoFinder1233

Fig. S4.48_OrthoFinder1255

Fig. S4.49_OrthoFinder1365

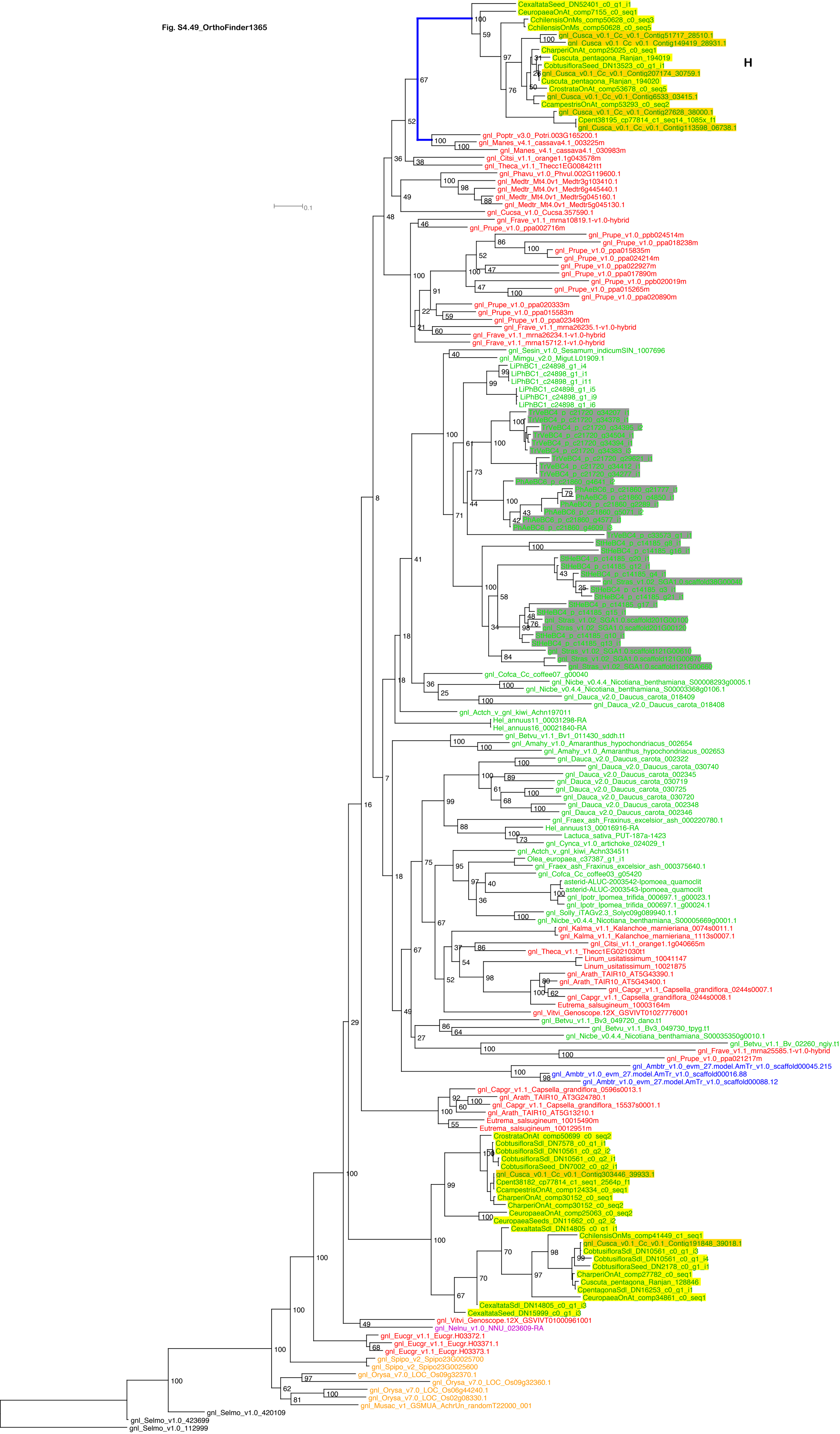


Fig. S4.50_OrthoFinder1390

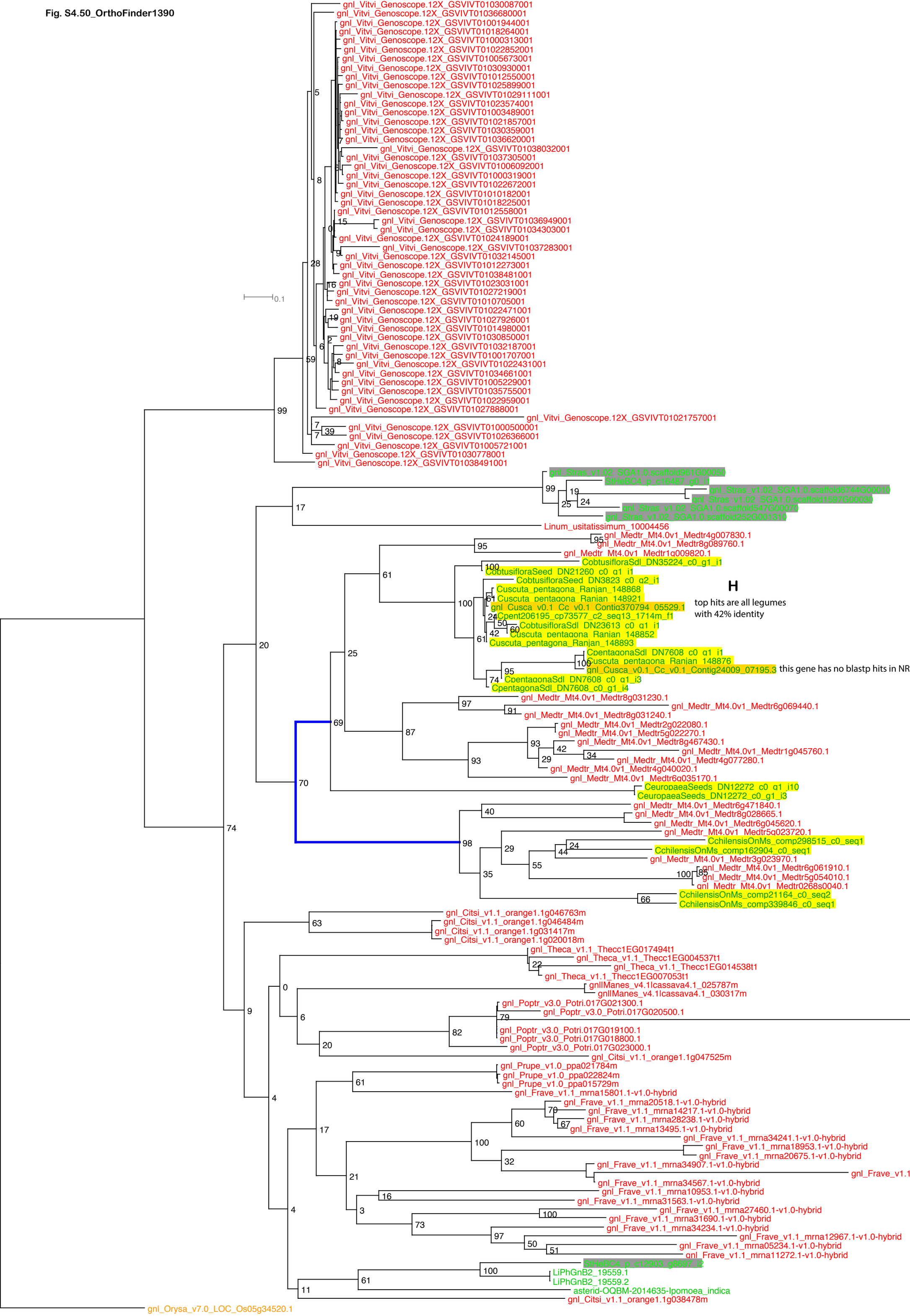


Fig. S4.51_OrthoFinder1507

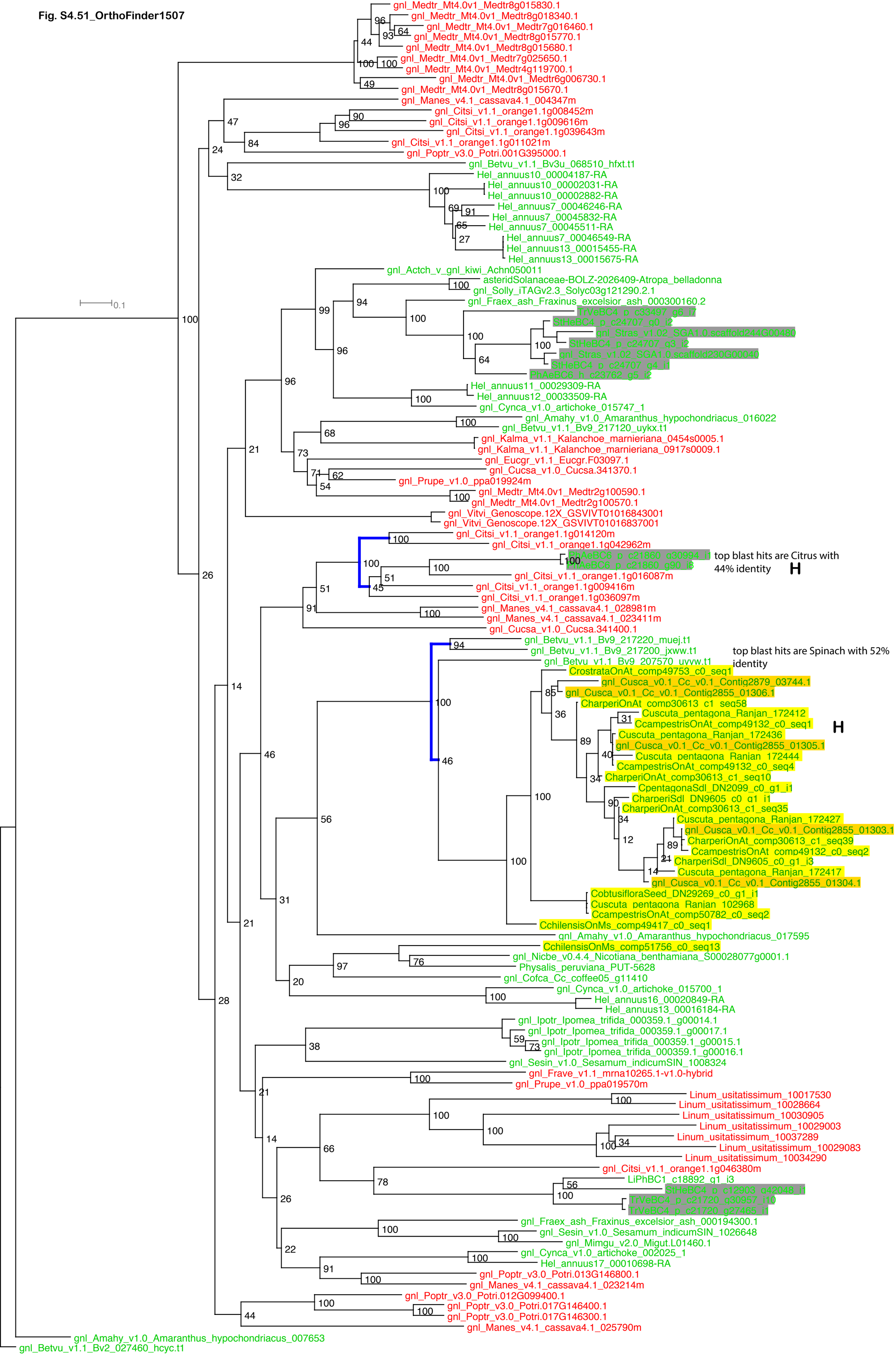


Fig. S4.52_OrthoFinder1611

Fig. S4.53_OrthoFinder2197

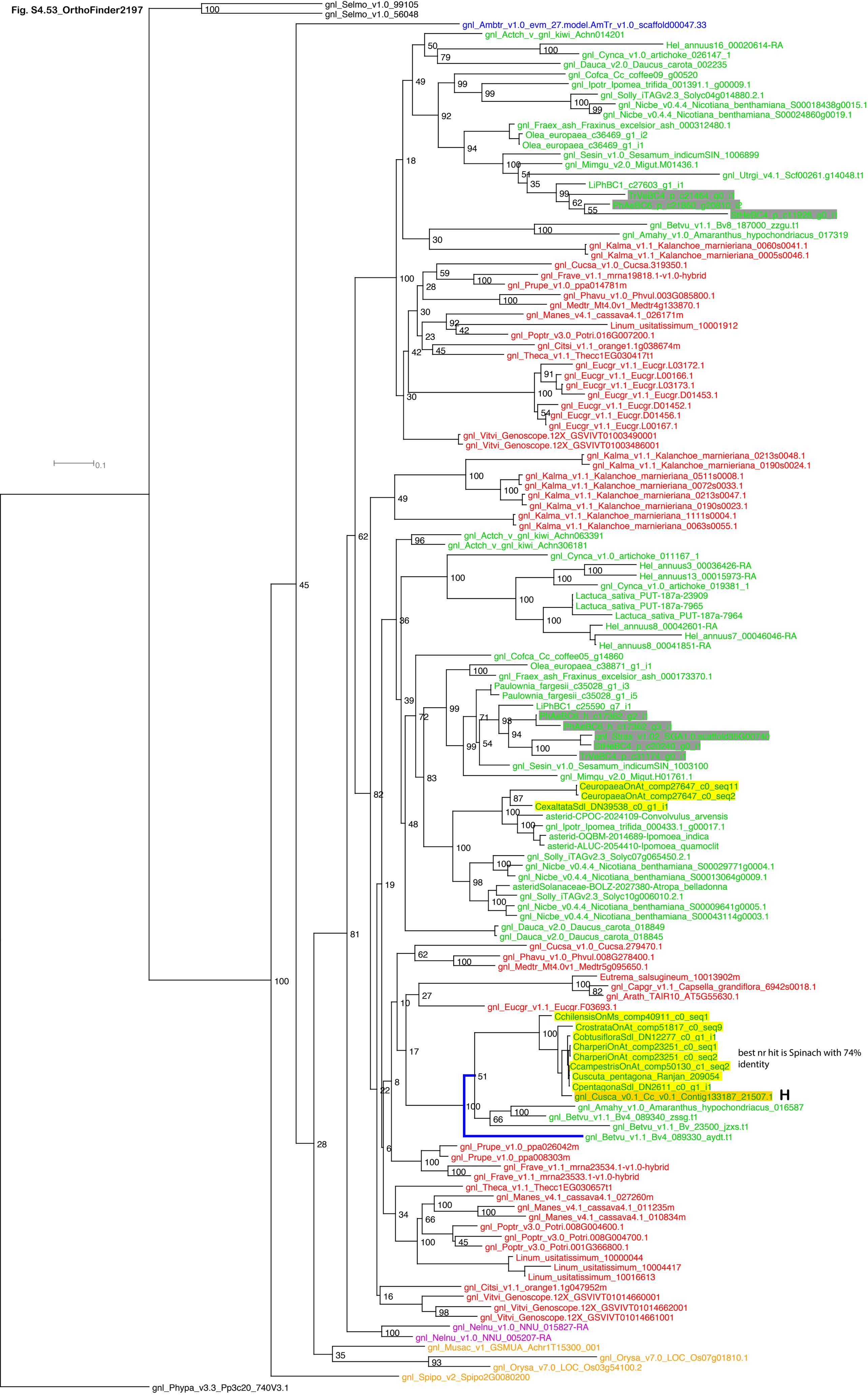


Fig. S4.54_OrthoFinder2360

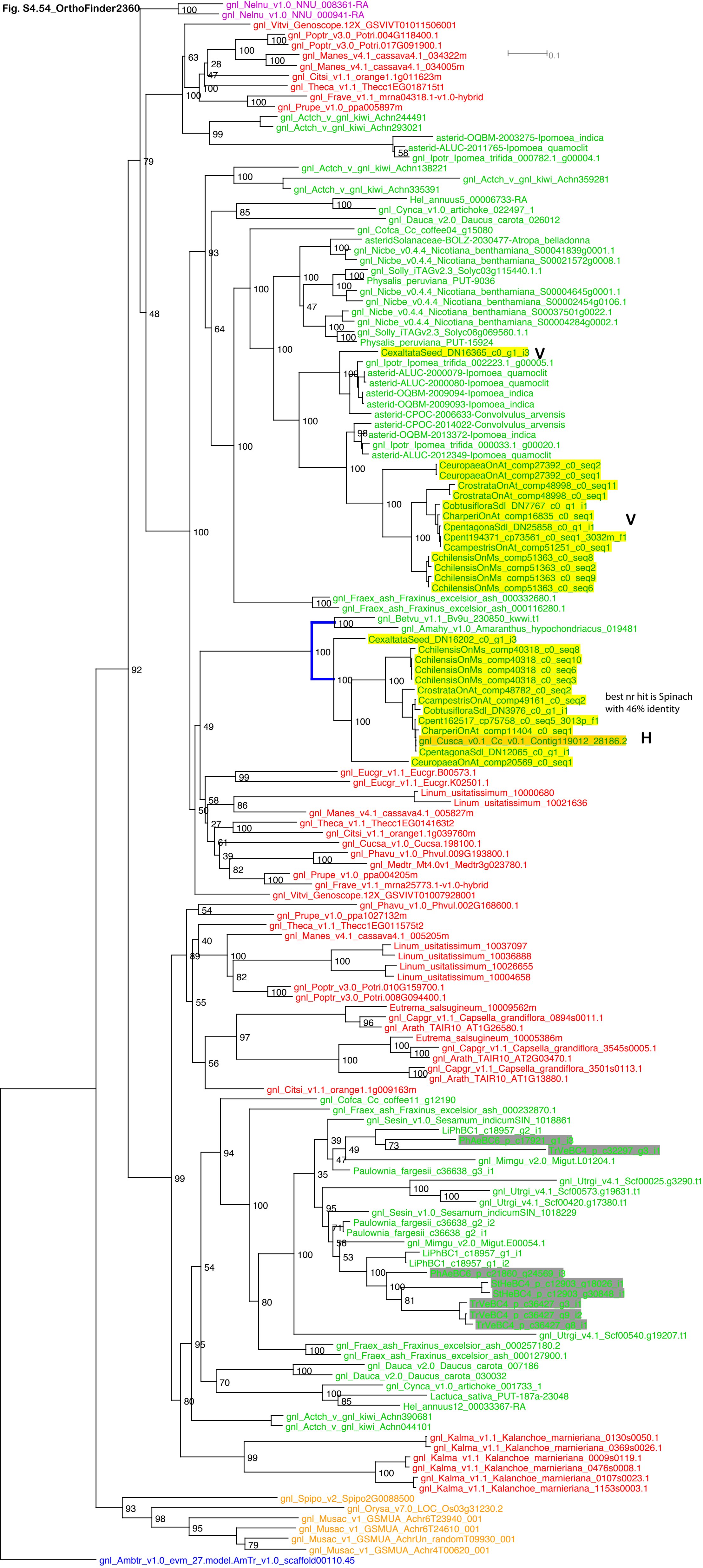


Fig. S4.55_OrthoFinder2450

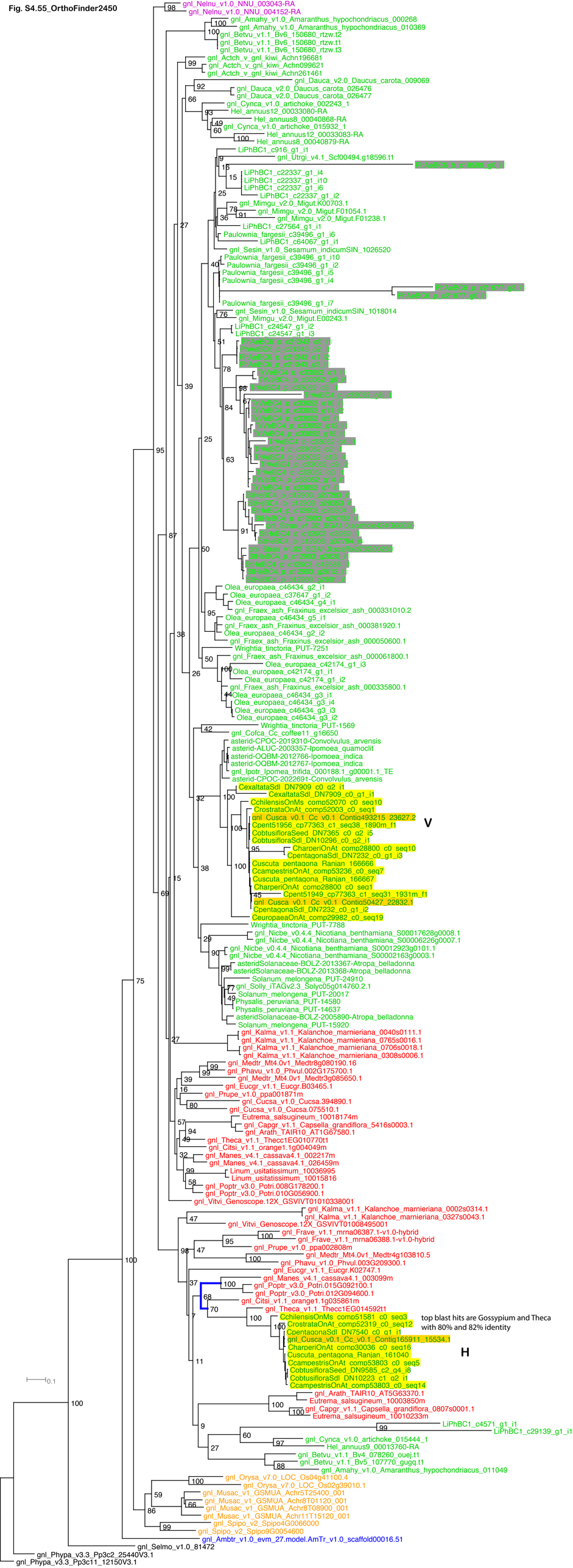


Fig. S4.56_OrthoFinder2921

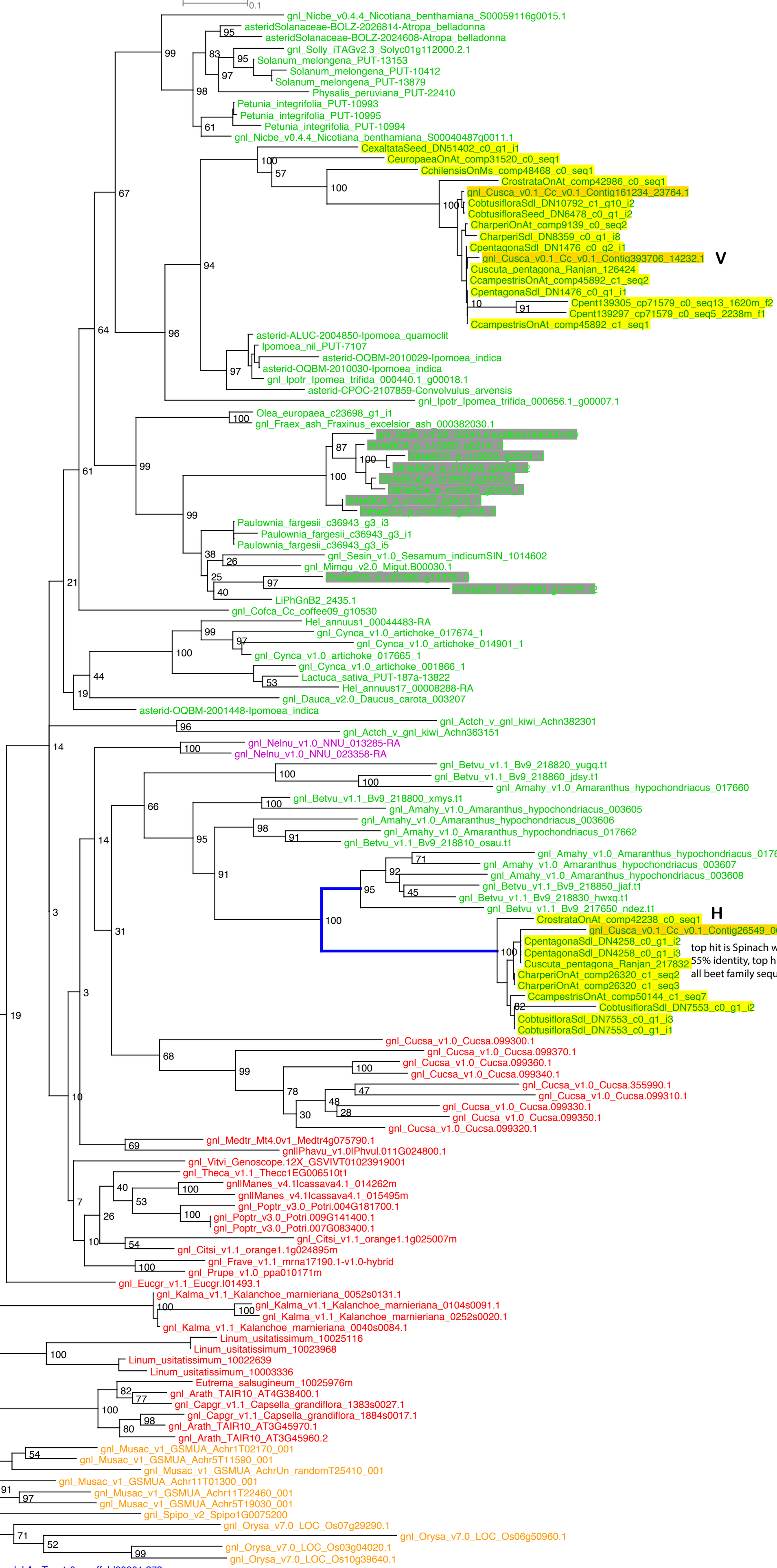


Fig. S4.57_OrthoFinder3657

Fig. S4.58_OrthoFinder3737

Fig. S4.59_OrthoFinder4025

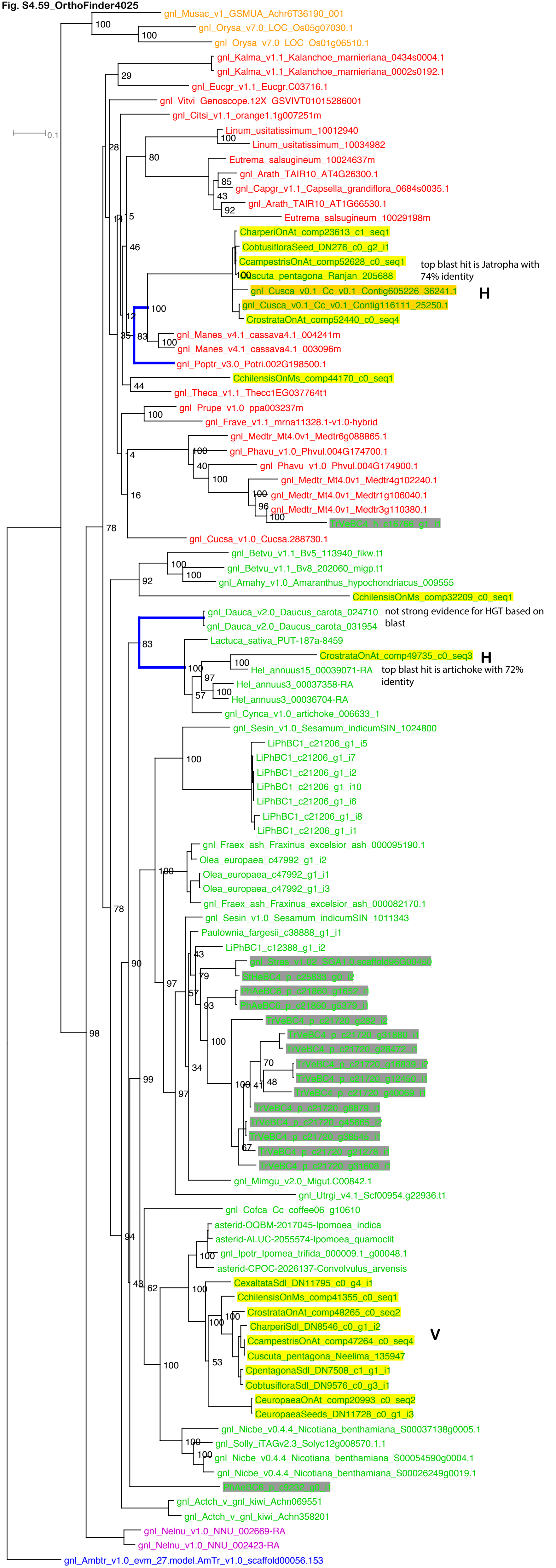


Fig. S4.60_OrthoFinder4076

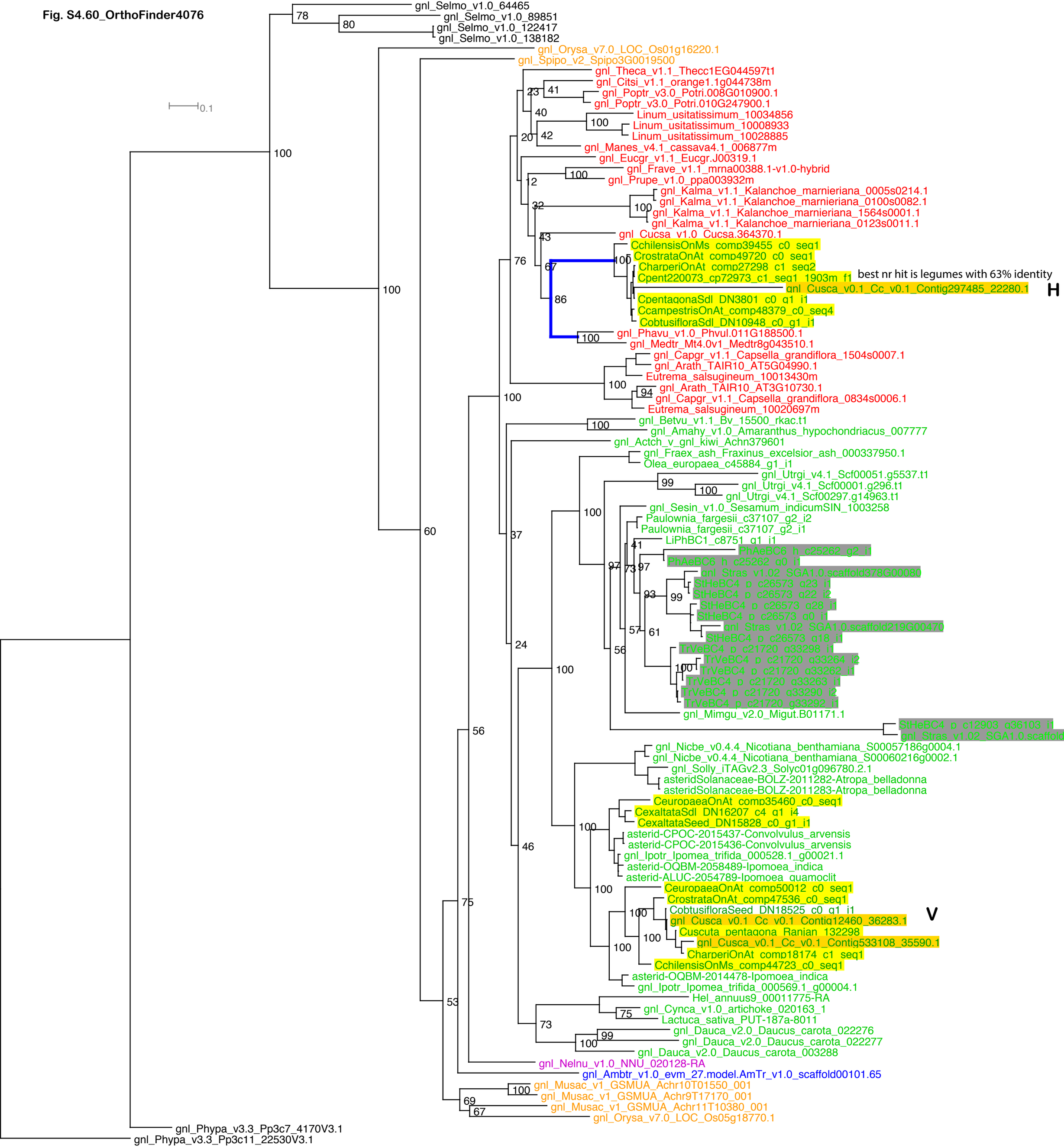


Fig. S4.61_OrthoFinder4151

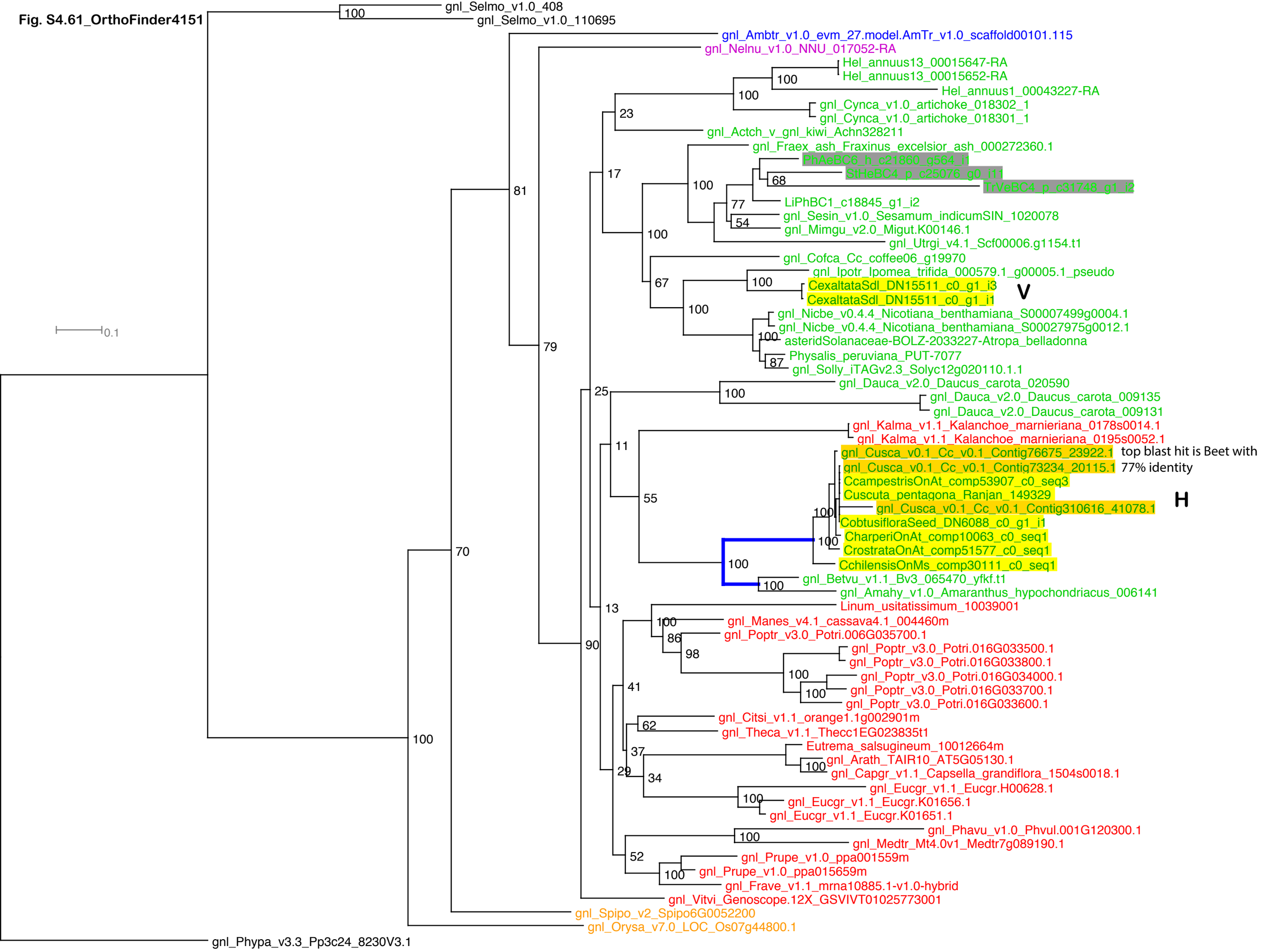


Fig. S4.62_OrthoFinder4392

Fig. S4.63_OrthoFinder4601

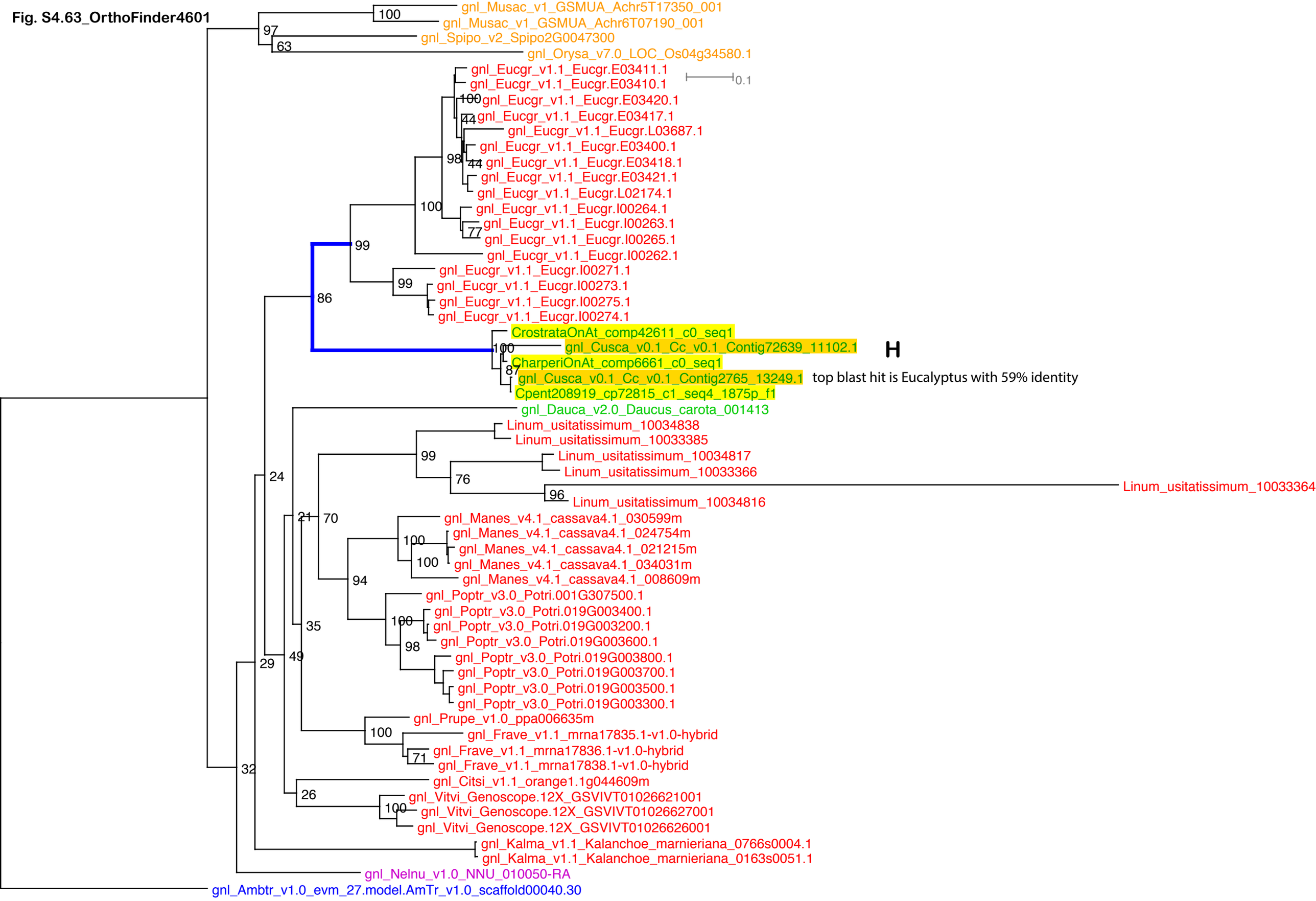


Fig. S4.64_OrthoFinder4864

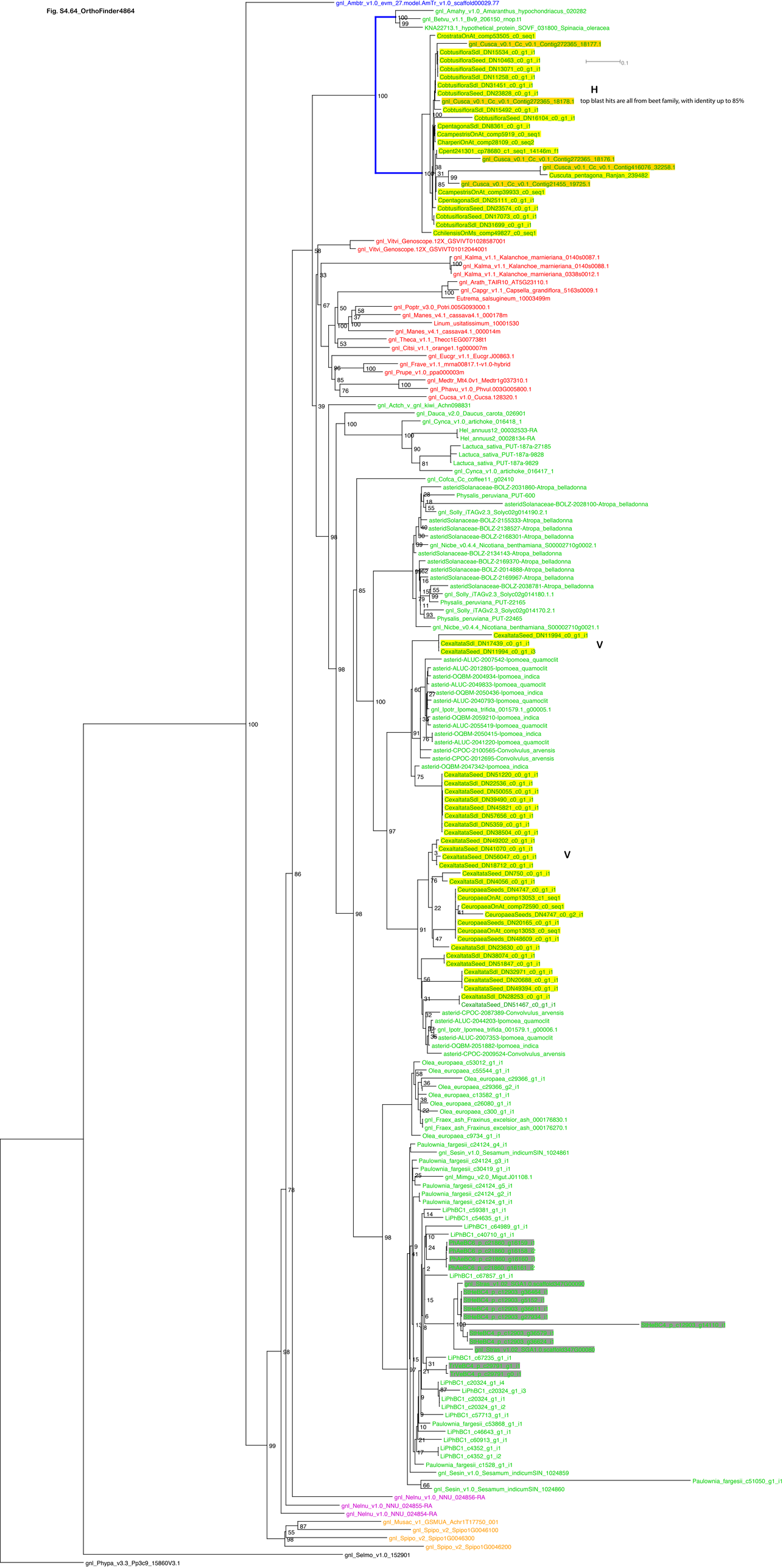


Fig. S4.65_OrthoFinder4903

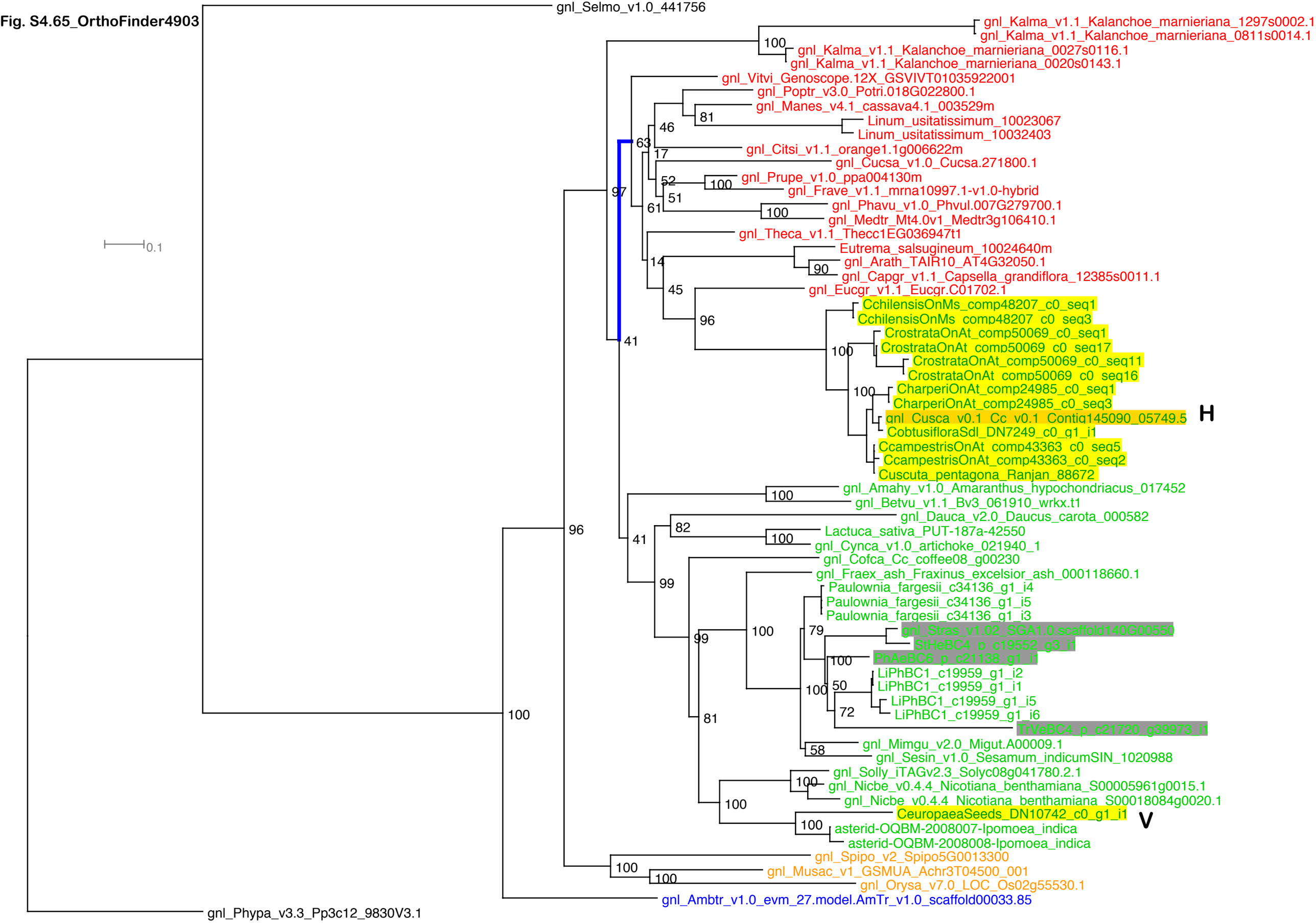


Fig. S4.66_OrthoFinder4958

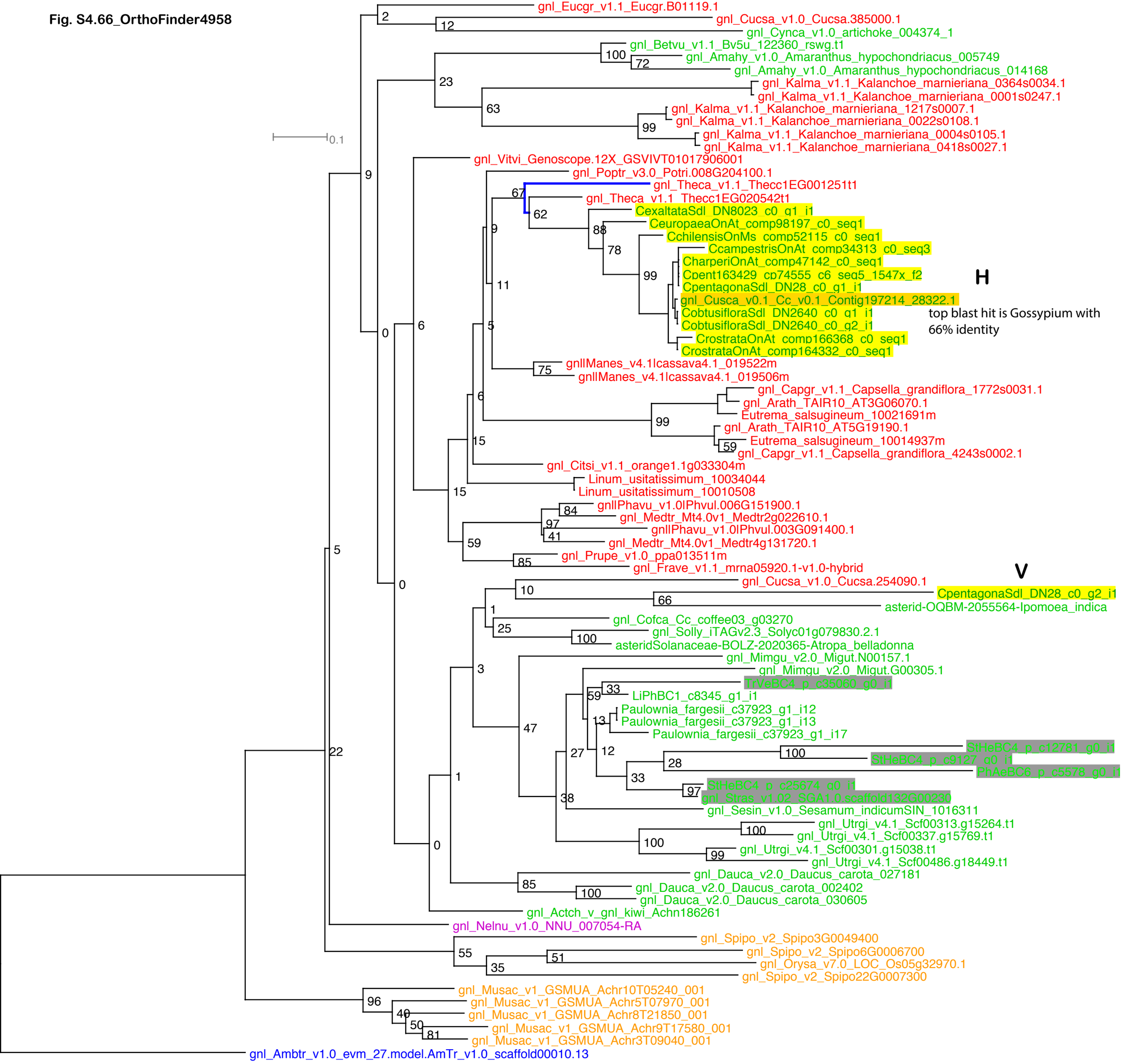


Fig. S4.67_OrthoFinder5307

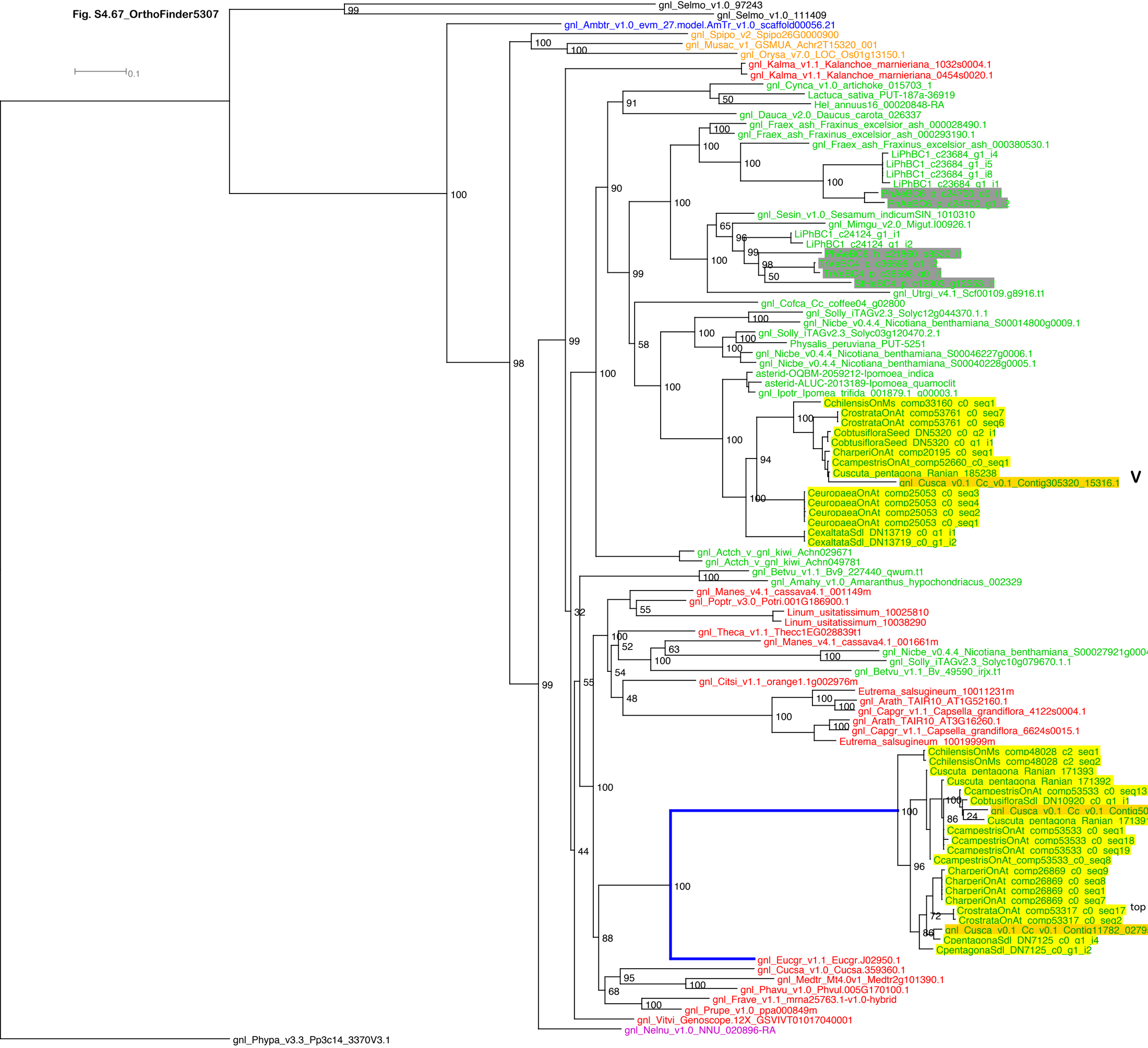


Fig. S4.68_OrthoFinder5372

Fig. S4.69_OrthoFinder5391

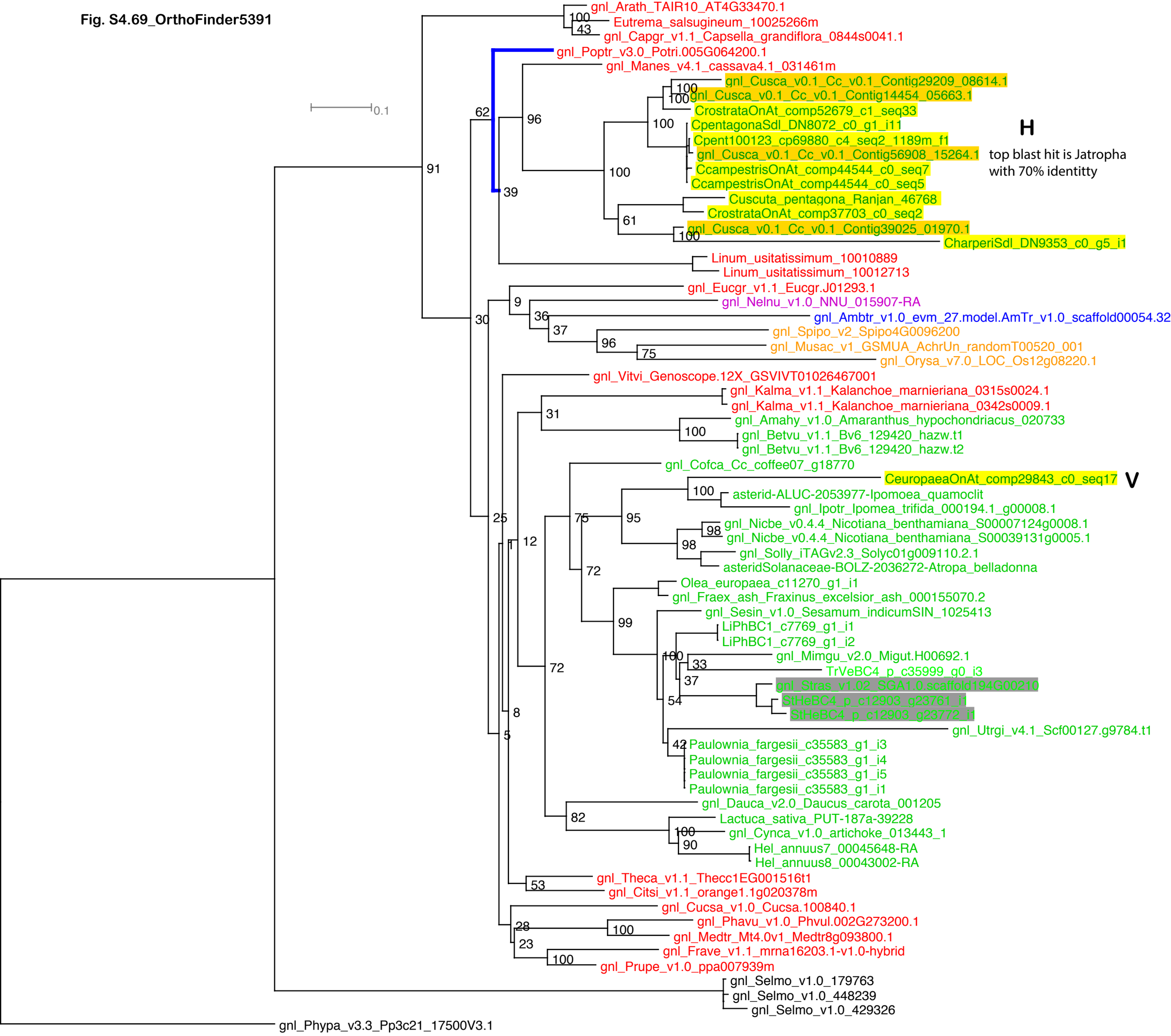


Fig. S4.70_OrthoFinder6202

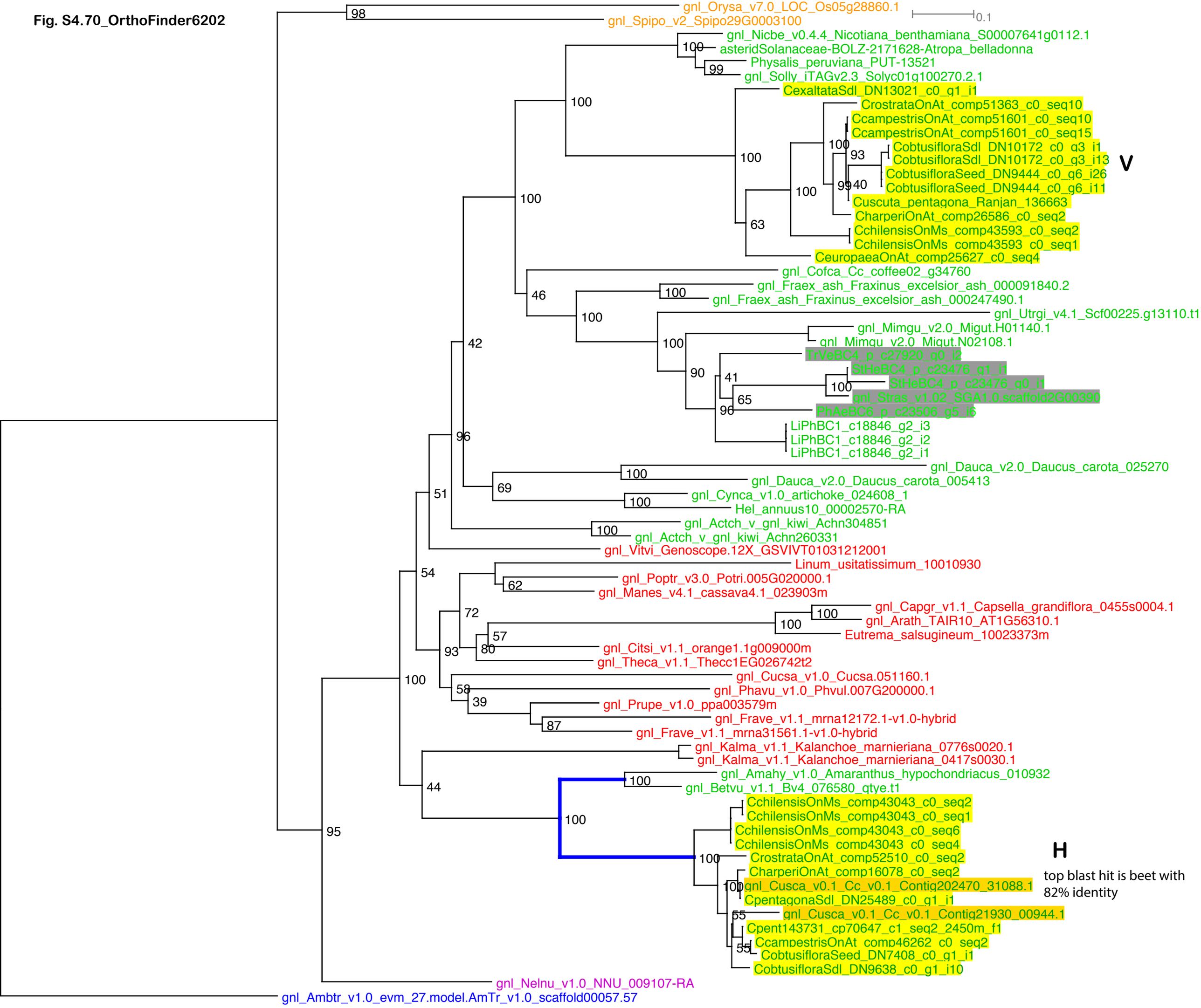


Fig. S4.71_OrthoFinder6290

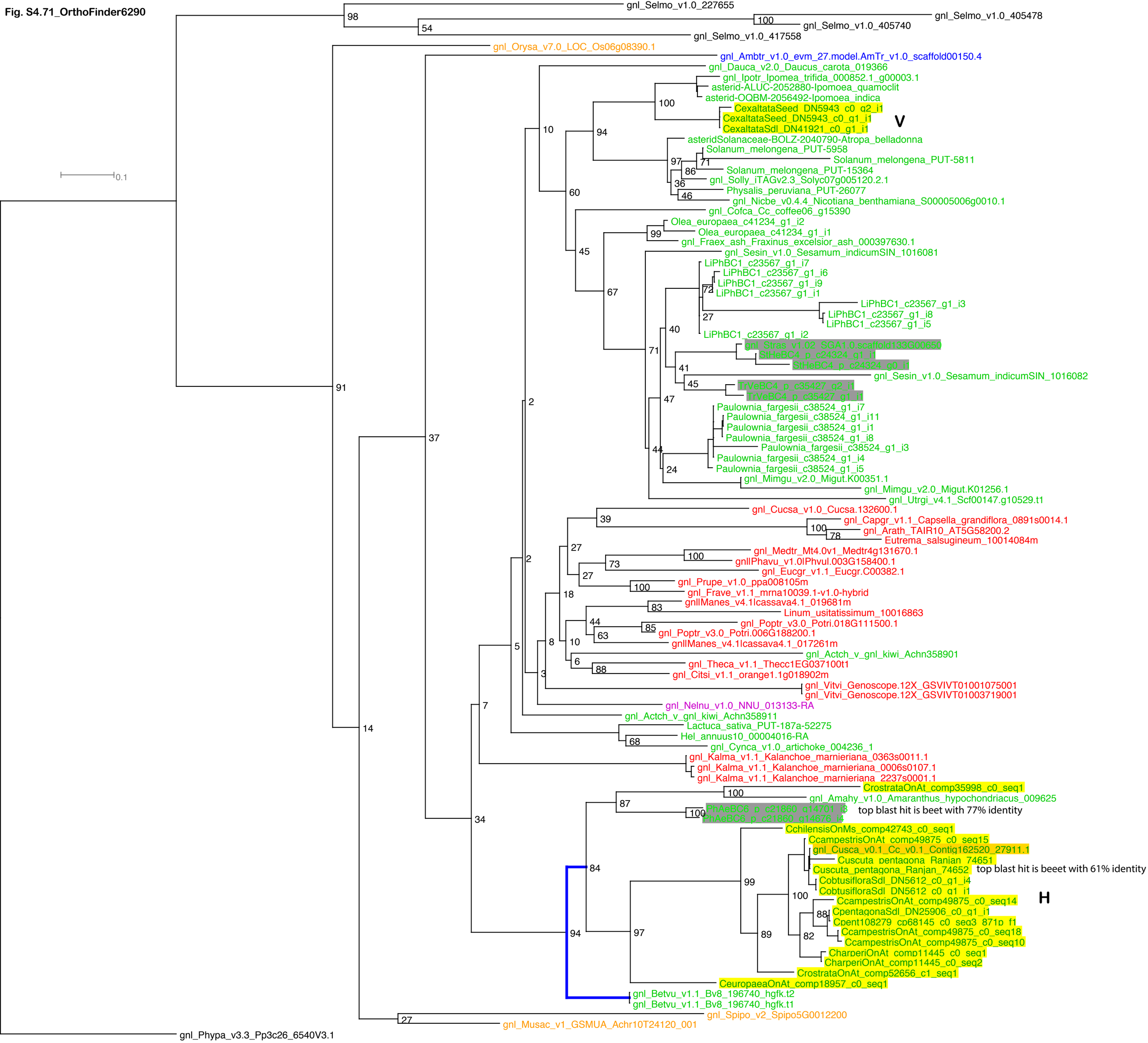


Fig. S4.72_OrthoFinder6504

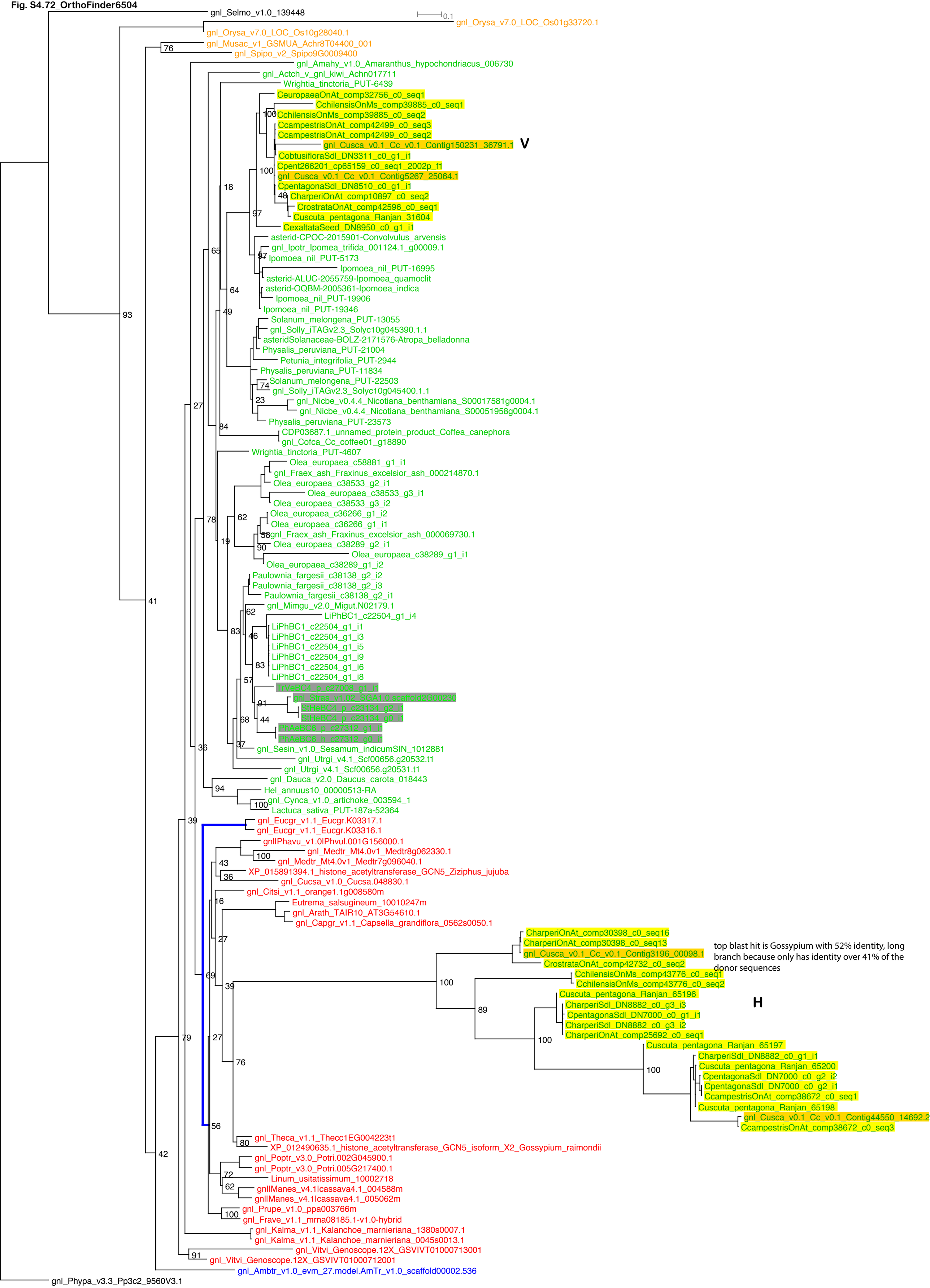


Fig. S4.73_OrthoFinder6508

Fig. S4.74_OrthoFinder6611

Fig. S4.75_OrthoFinder6749

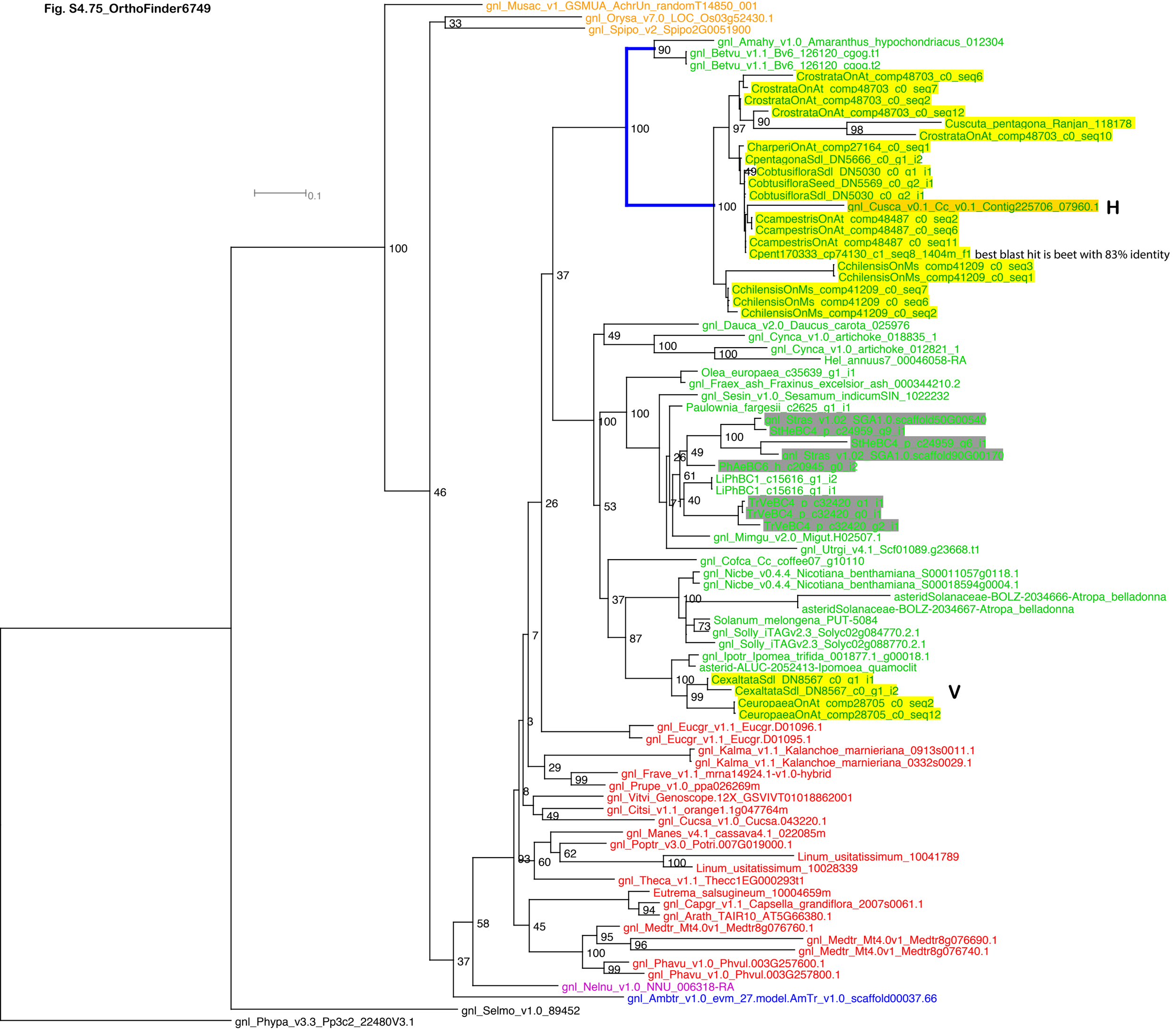


Fig. S4.76_OrthoFinder7243

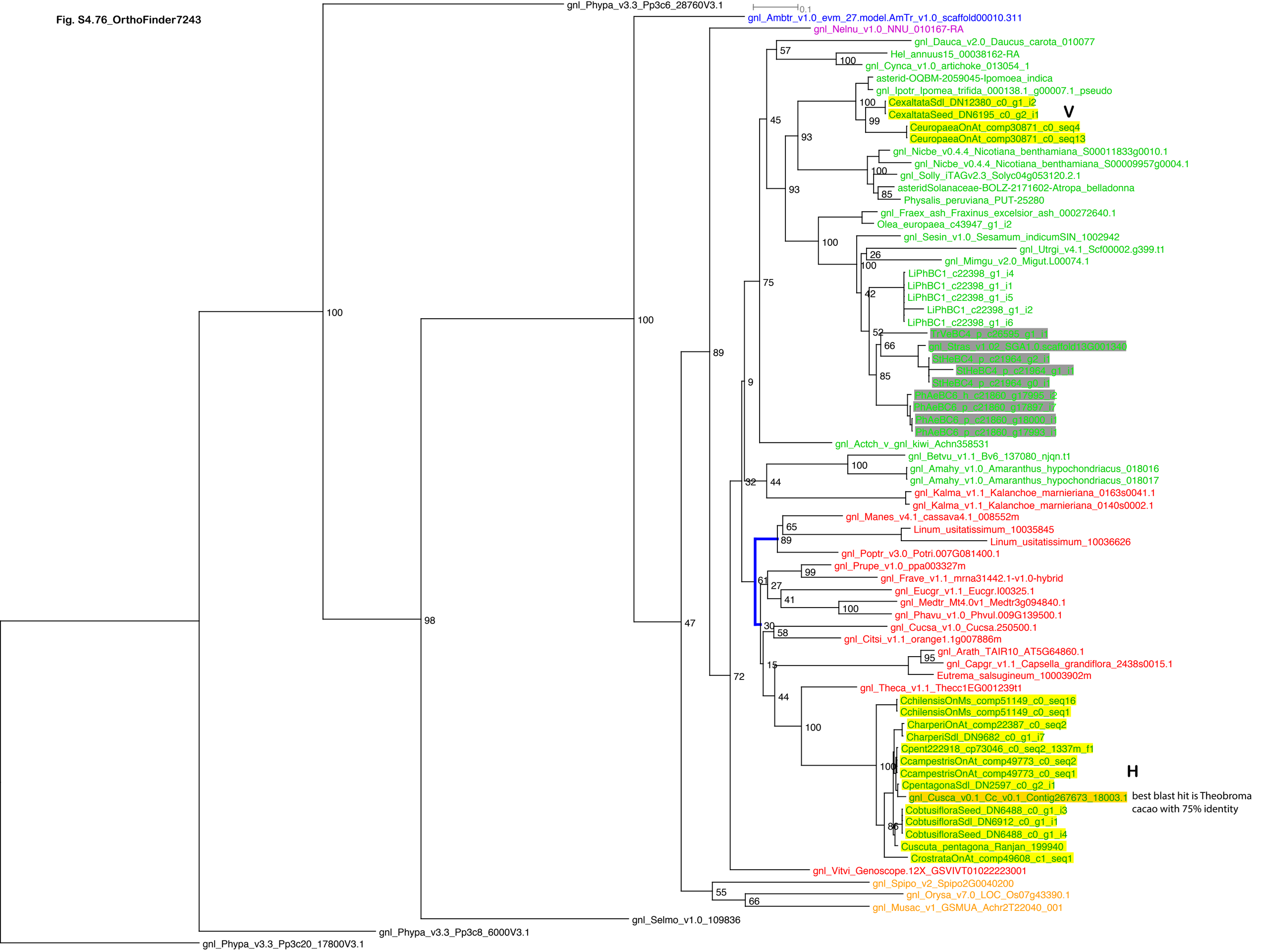


Fig. S4.77_OrthoFinder7298

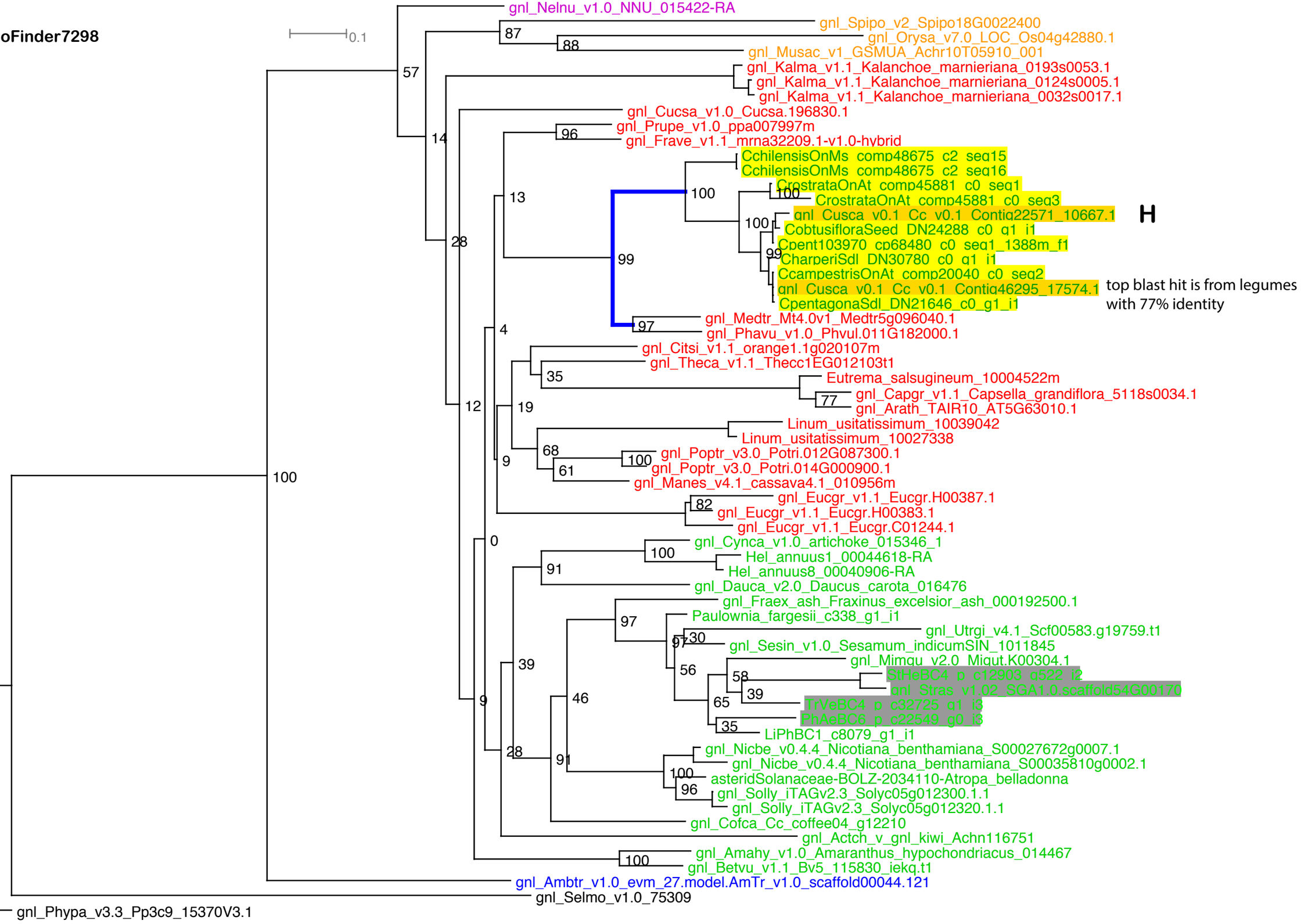


Fig. S4.78_OrthoFinder7647

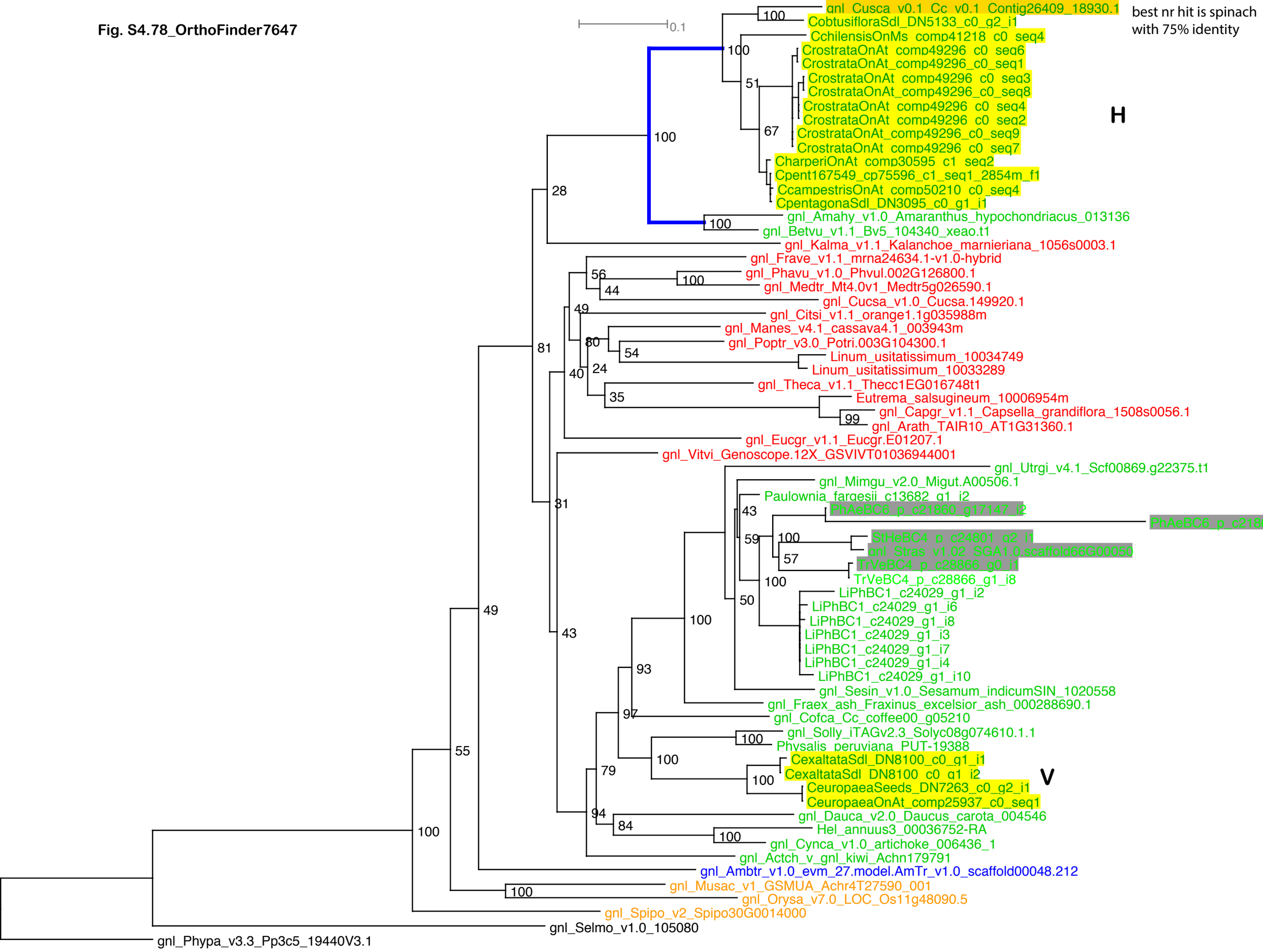


Fig. S4.79_OrthoFinder7659

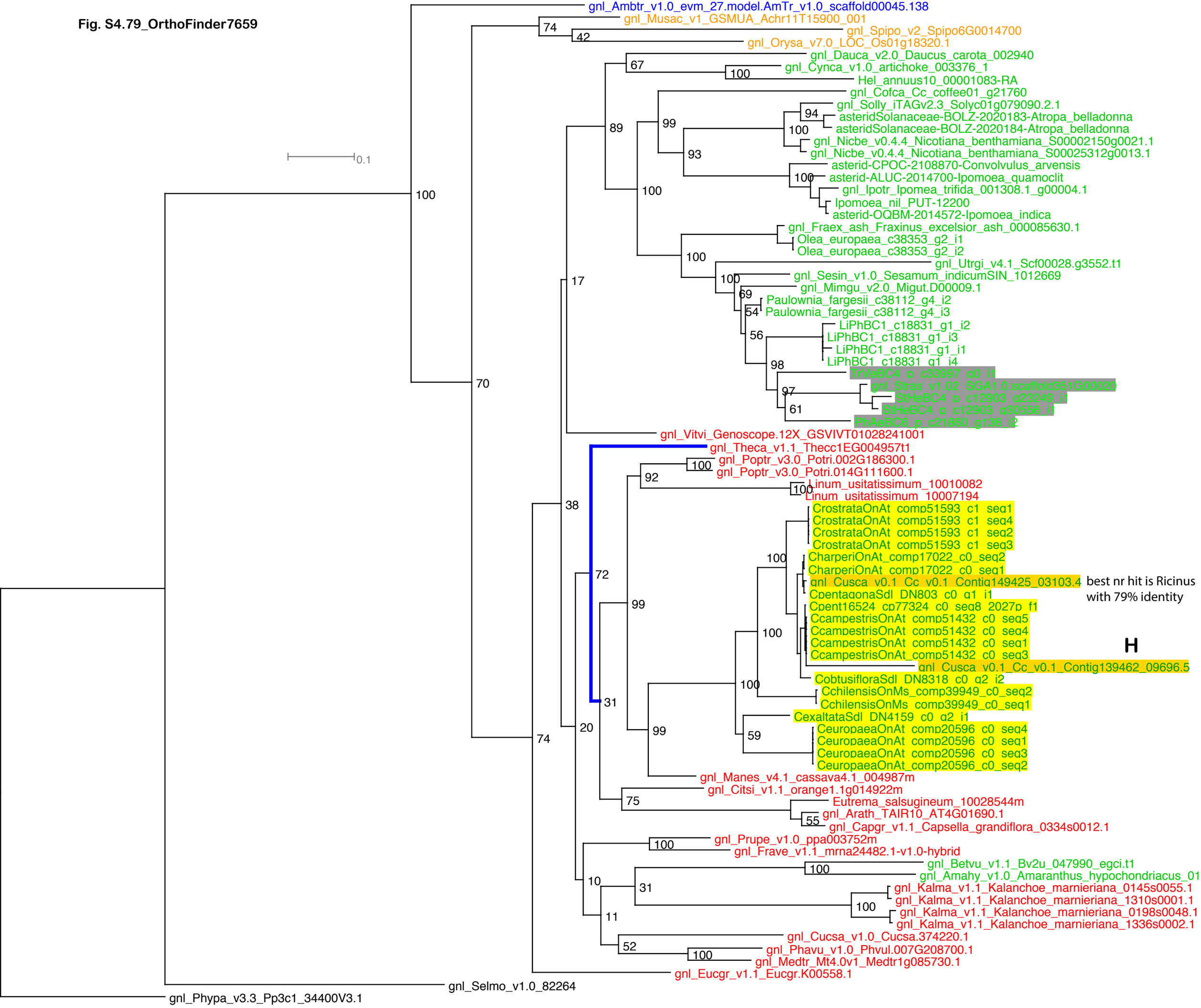


Fig. S4.80_OrthoFinder7935

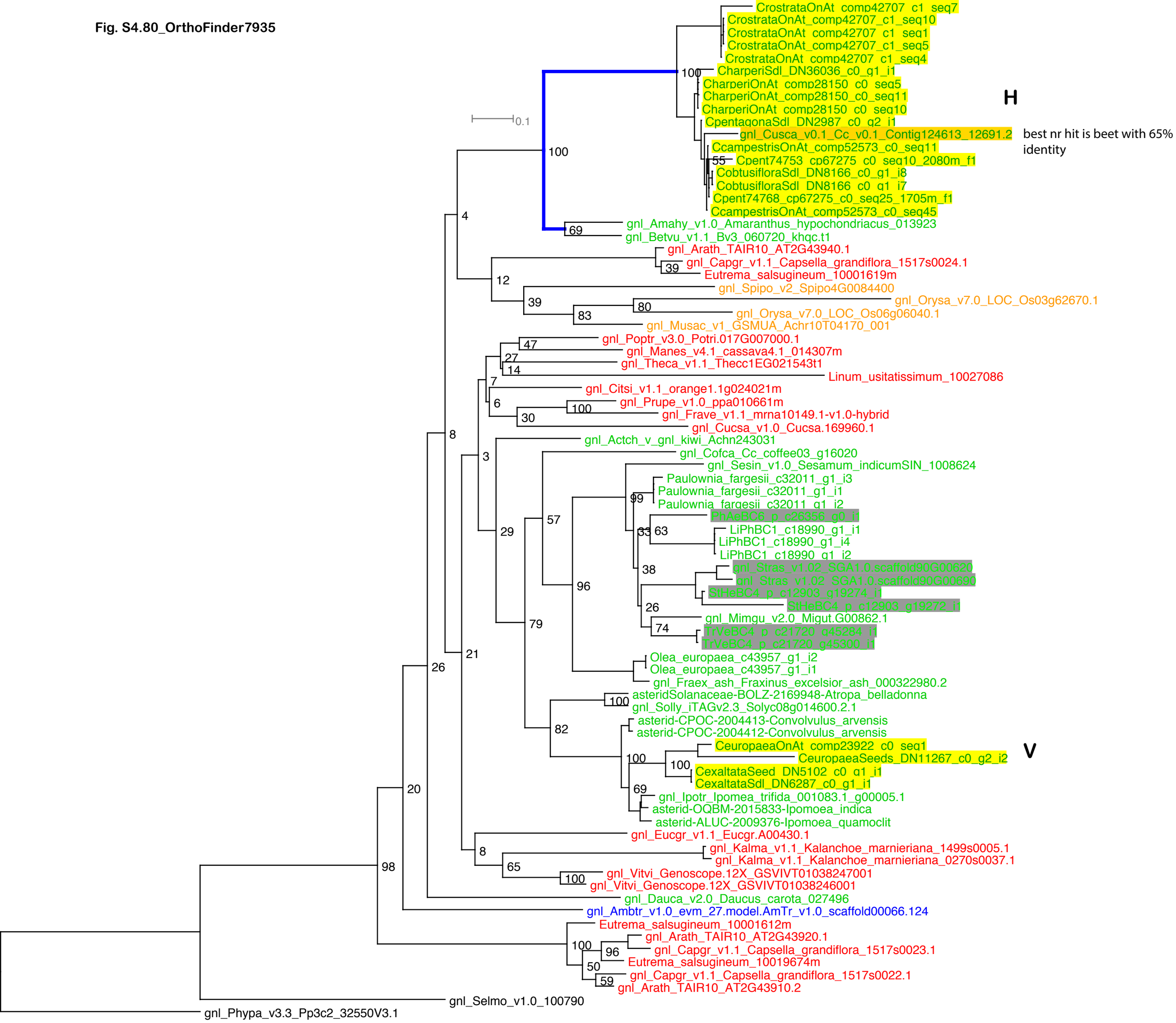


Fig. S4.81_OrthoFinder7968

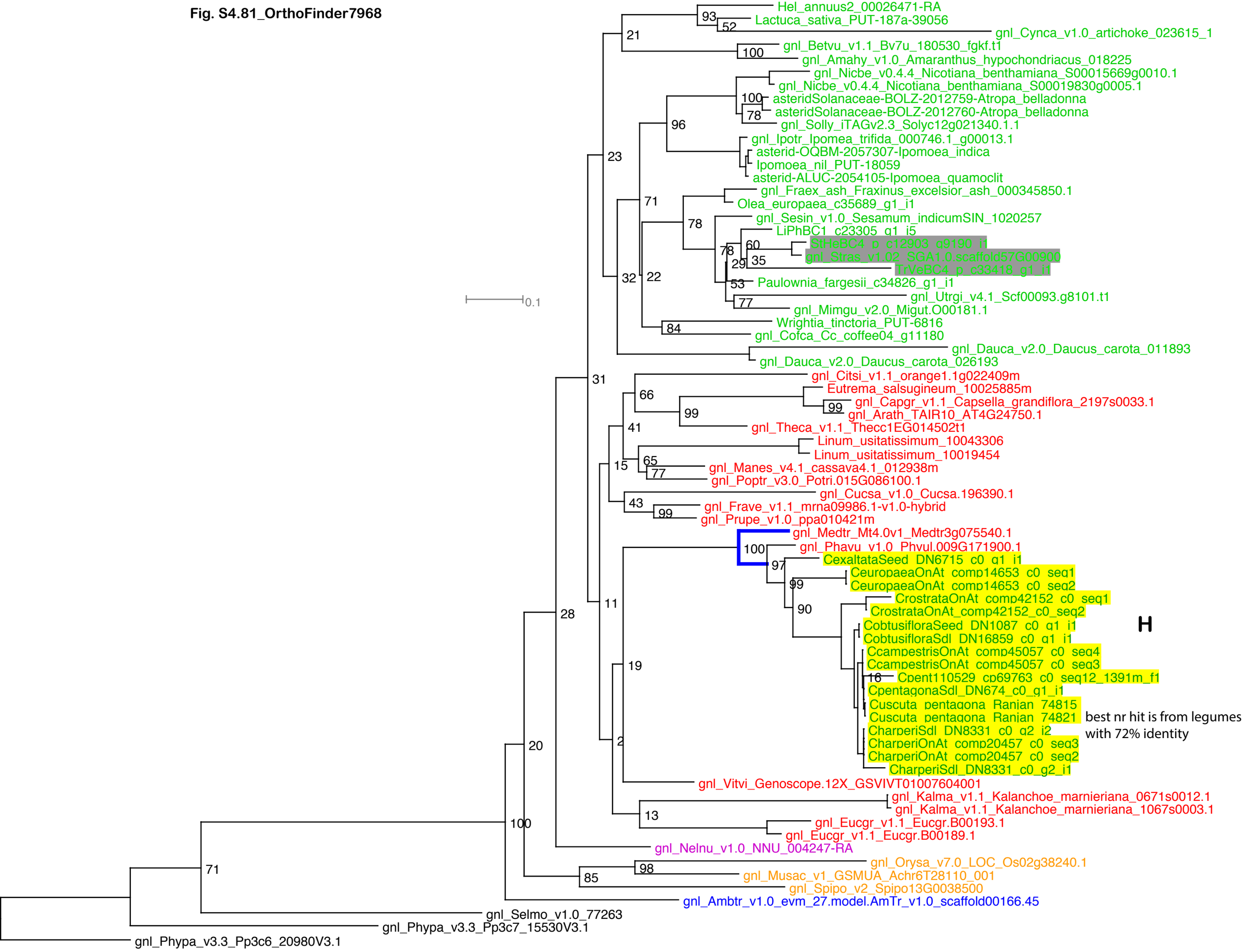


Fig. S4.6_OrthoFinder8077

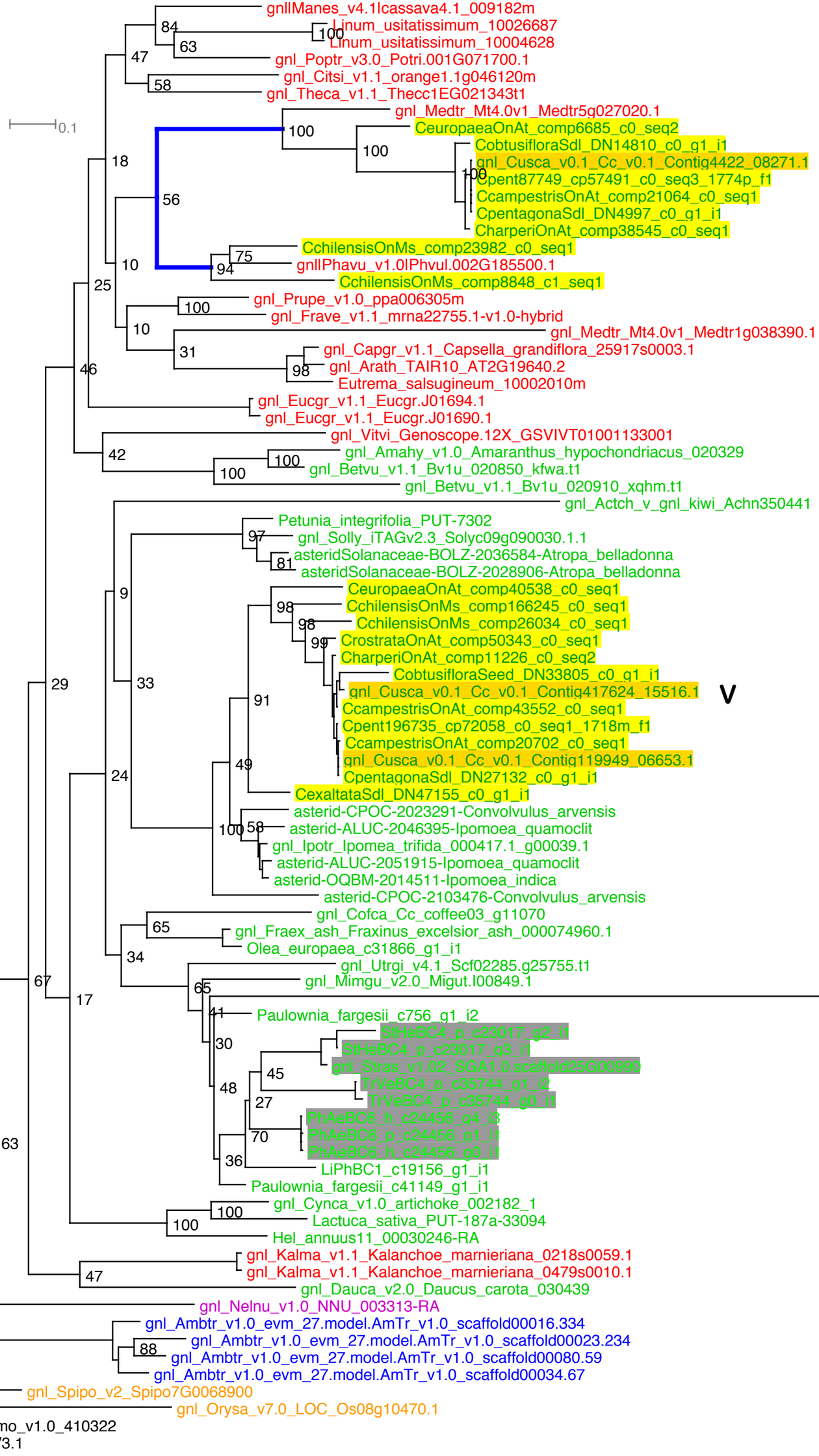


Fig. S4.83_OrthoFinder8307

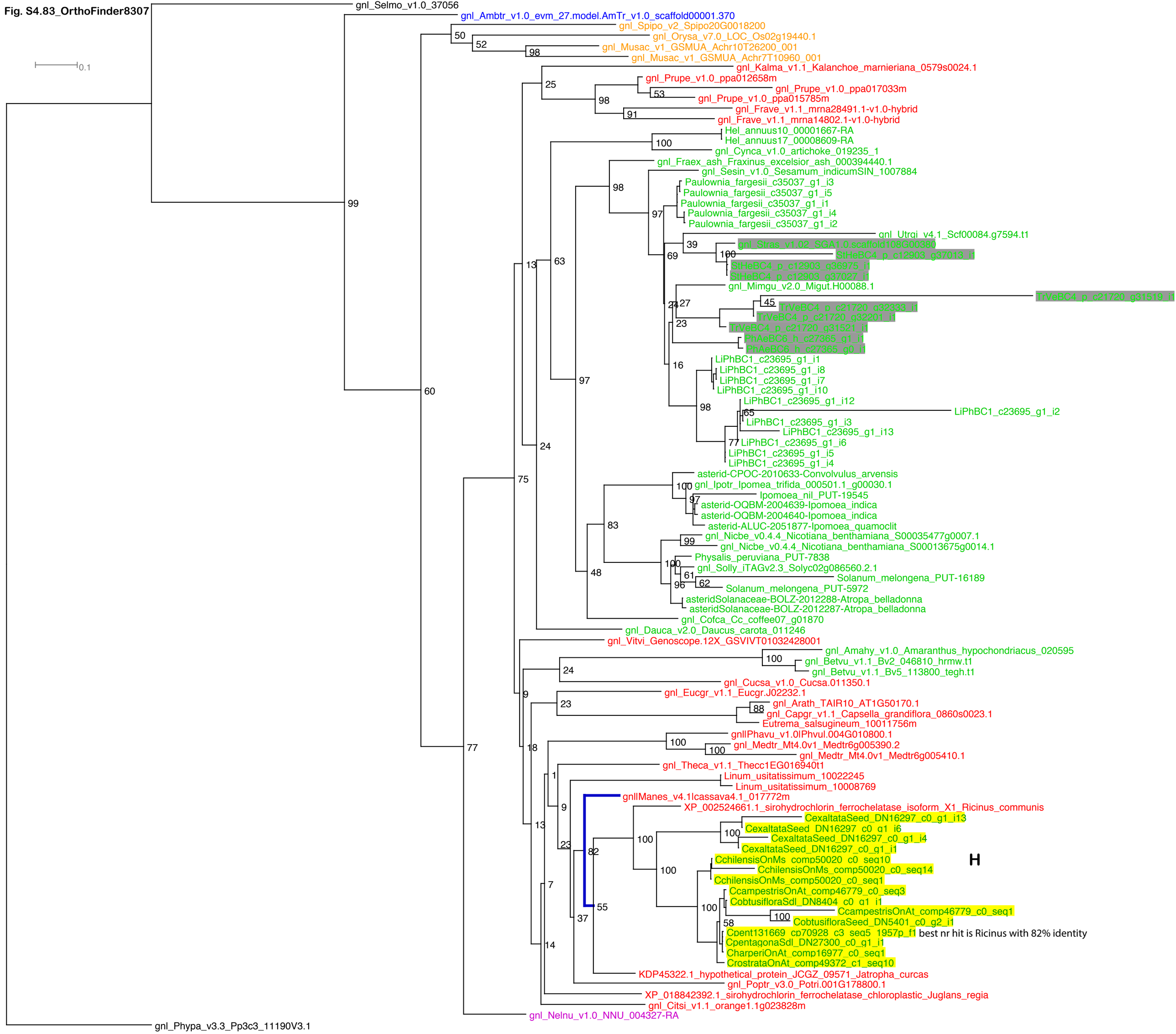


Fig. S4.84_OrthoFinder8752

Fig. S4.85_OrthoFinder8884

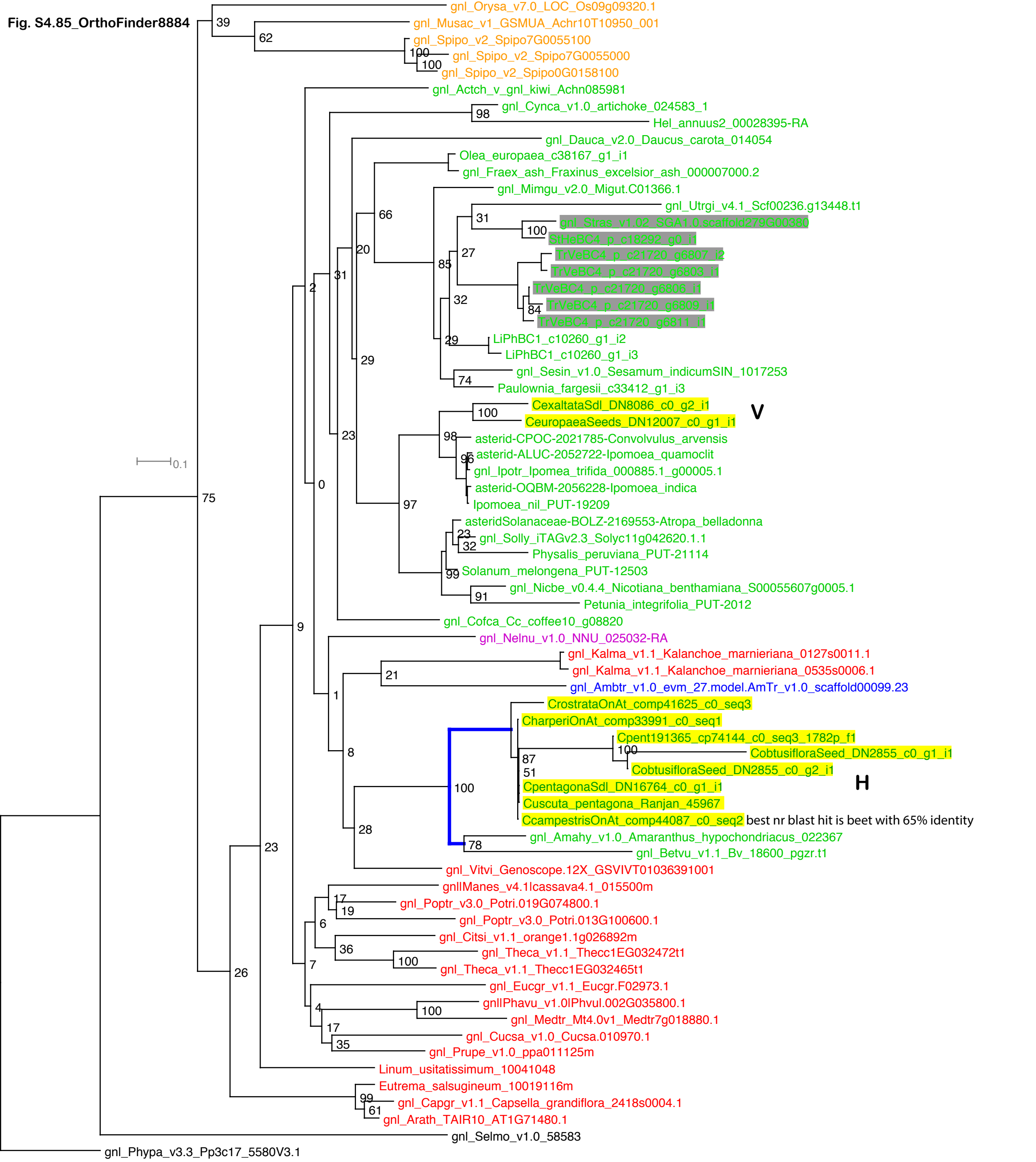


Fig. S4.86_OrthoFinder9036

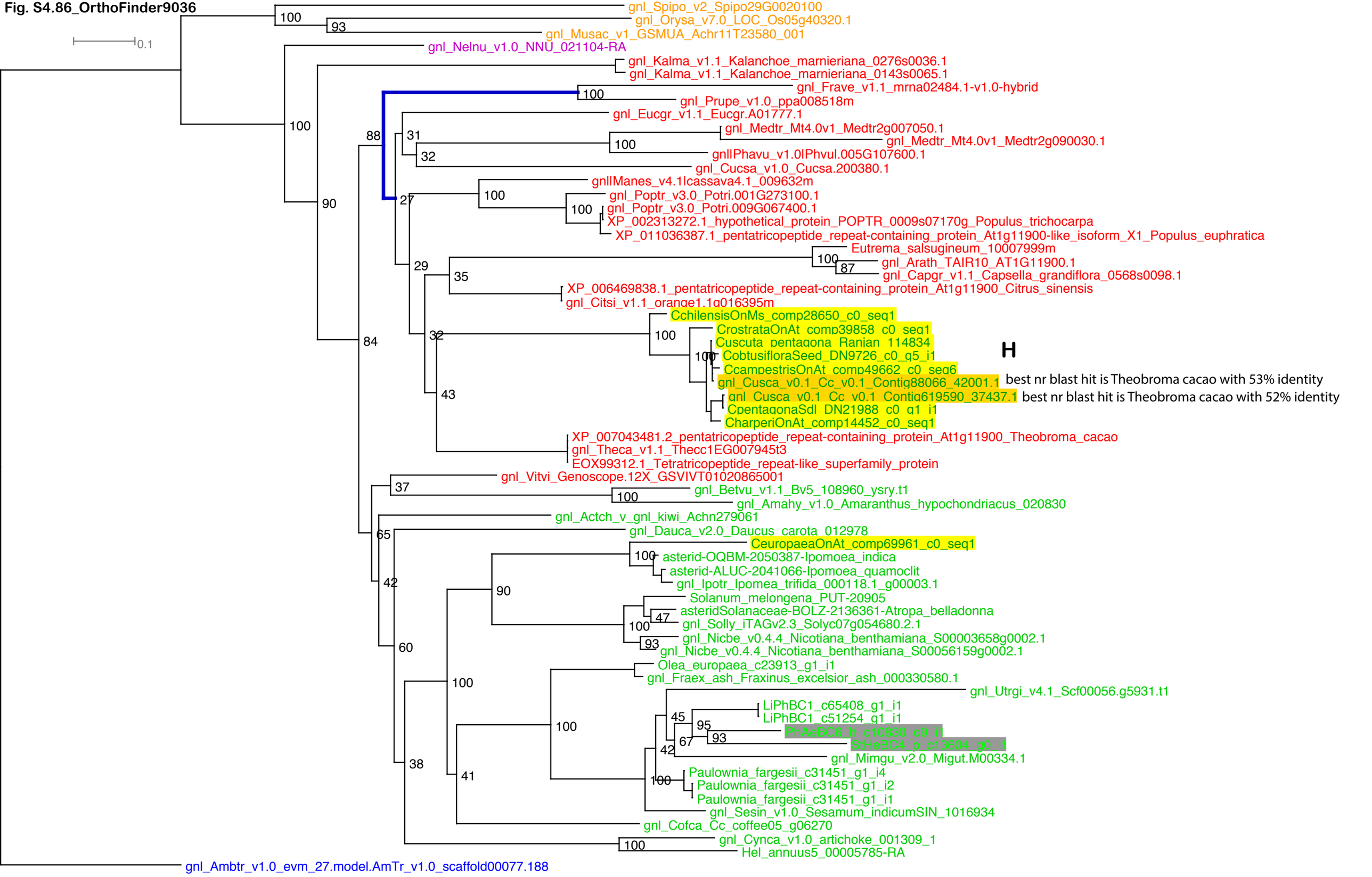


Fig. S4.87_OrthoFinder9103

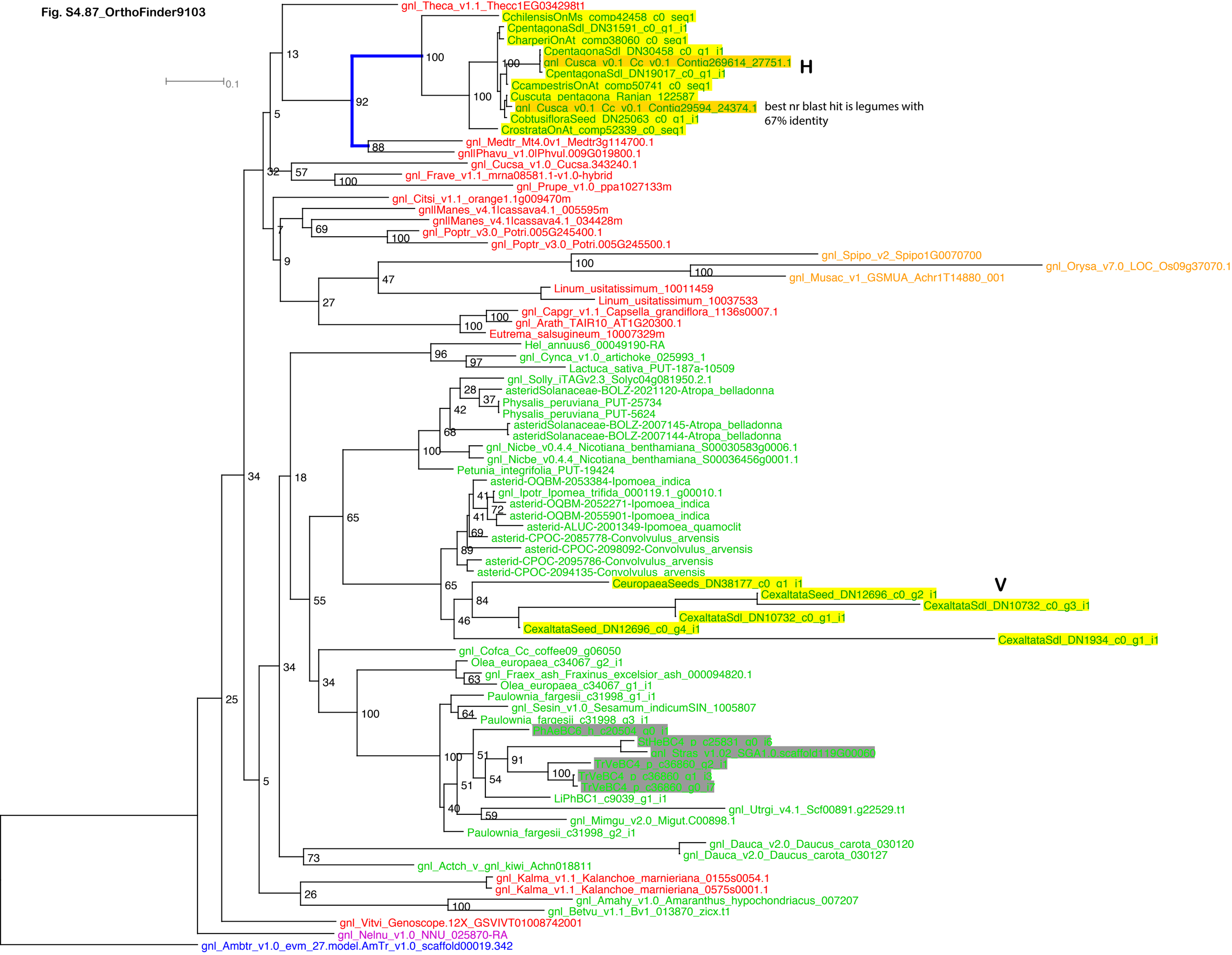


Fig. S4.88_OrthoFinder9298

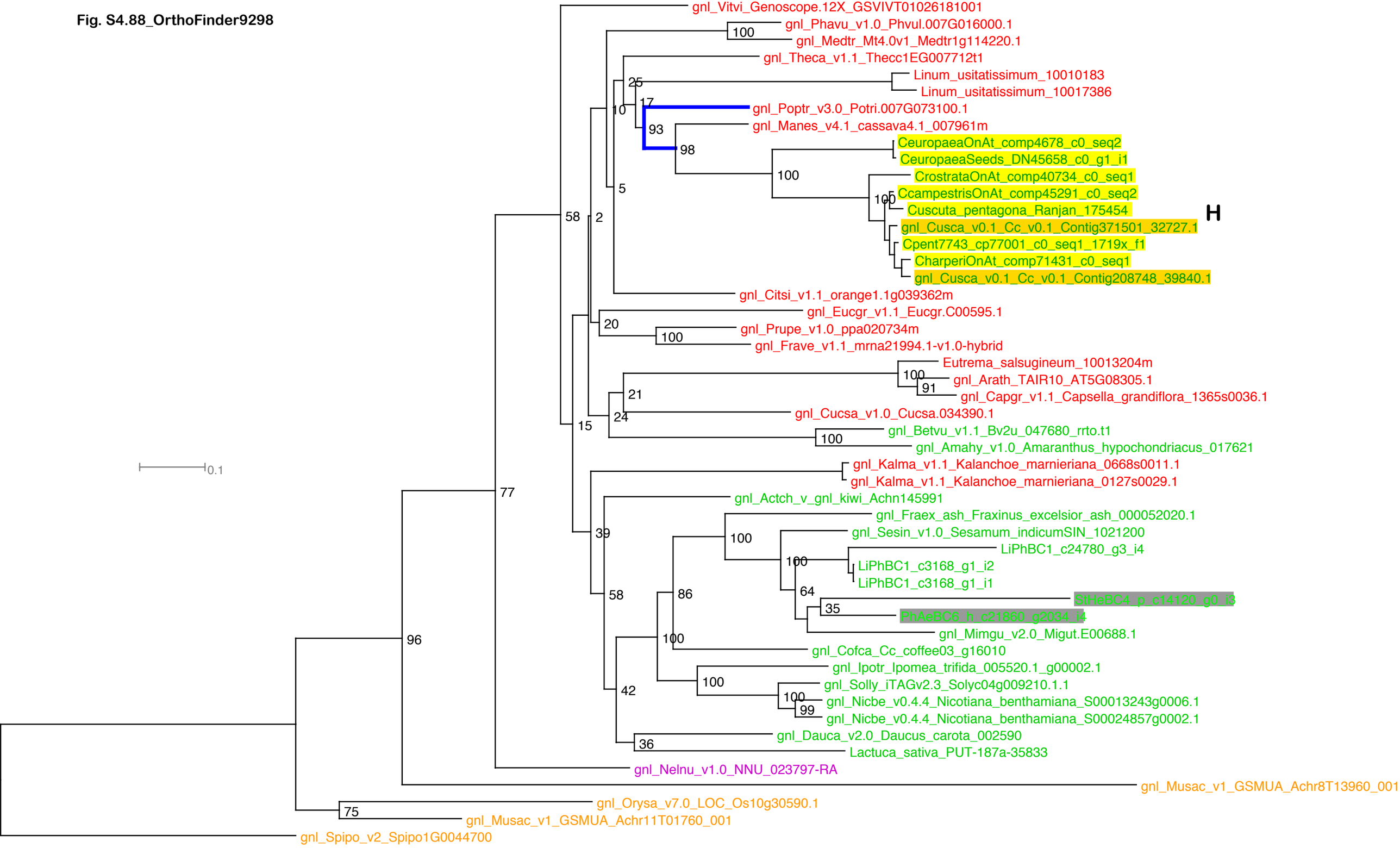


Fig. S4.89_OrthoFinder10870

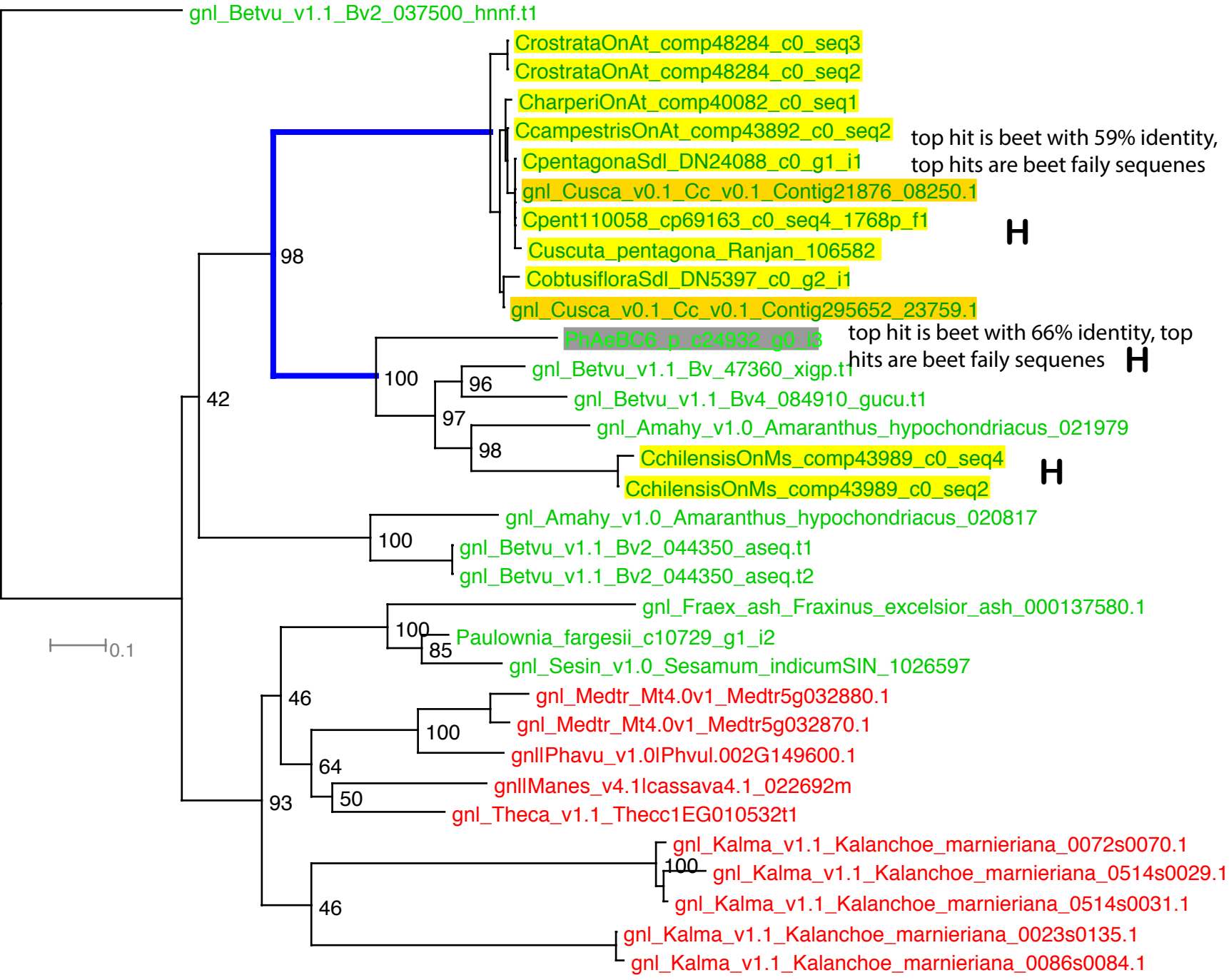


Fig. S4.90_OrthoFinder11162

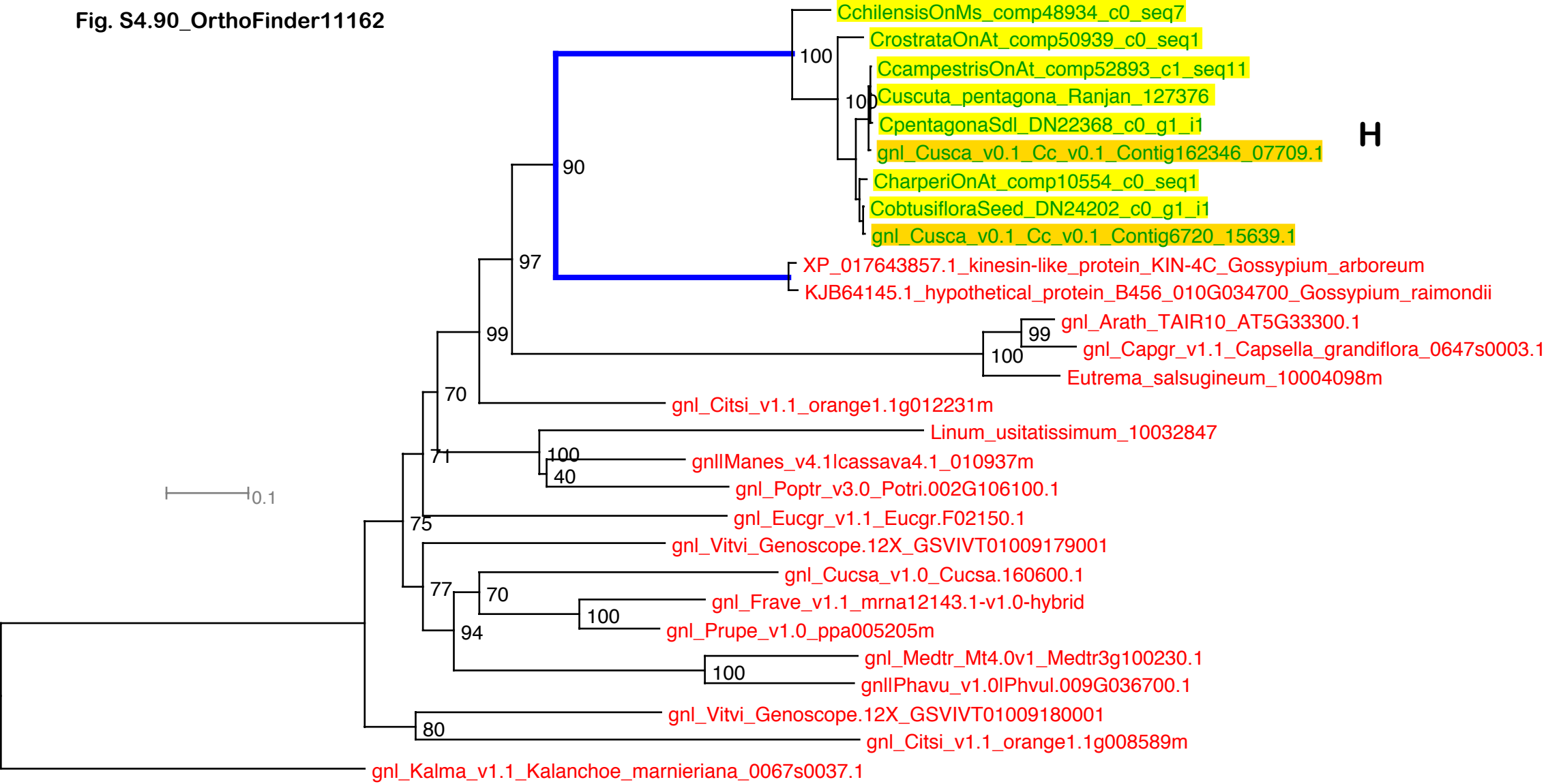


Fig. S4.91_OrthoFinder11225

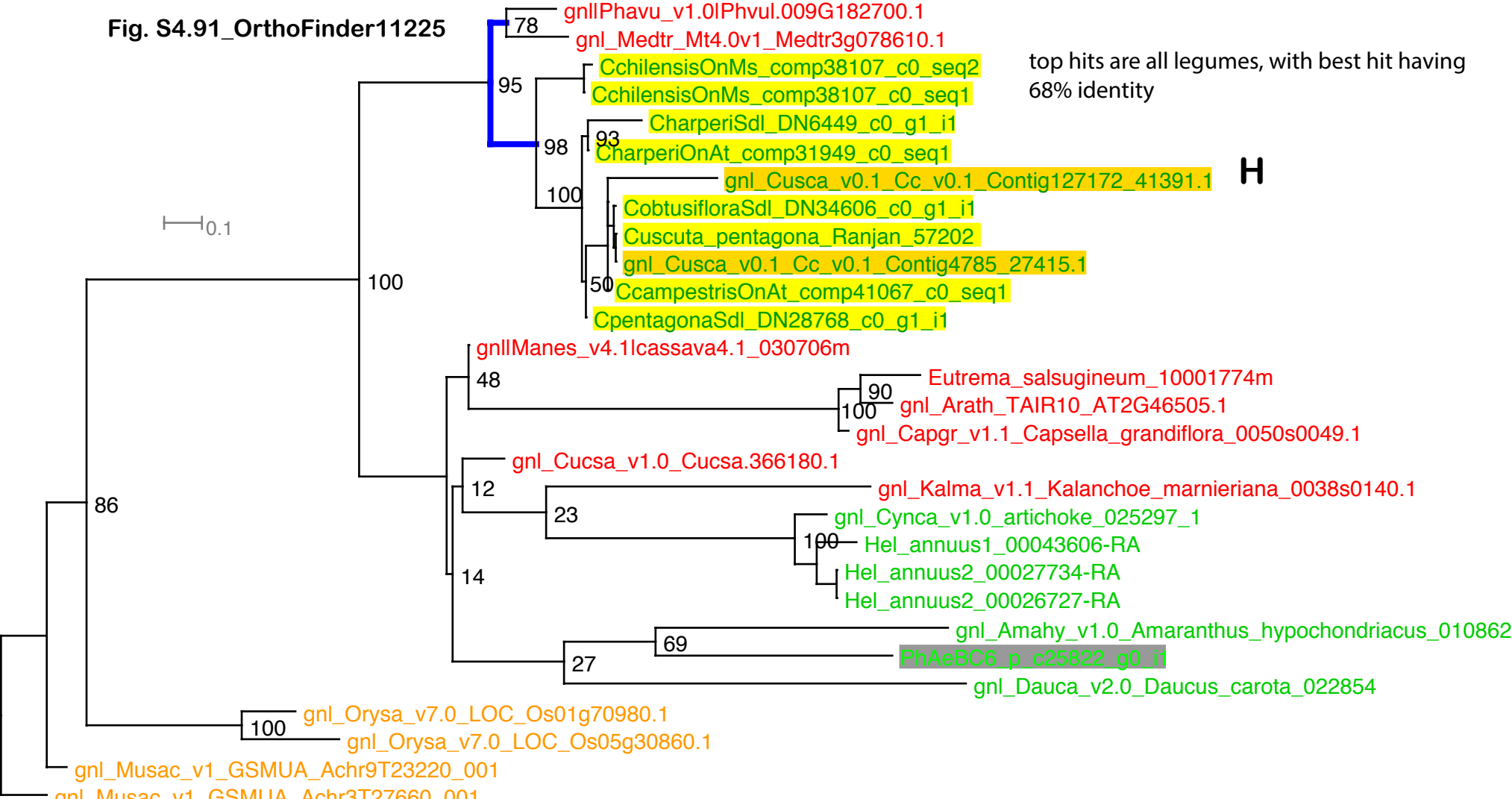


Fig. S4.92_OrthoFinder11738

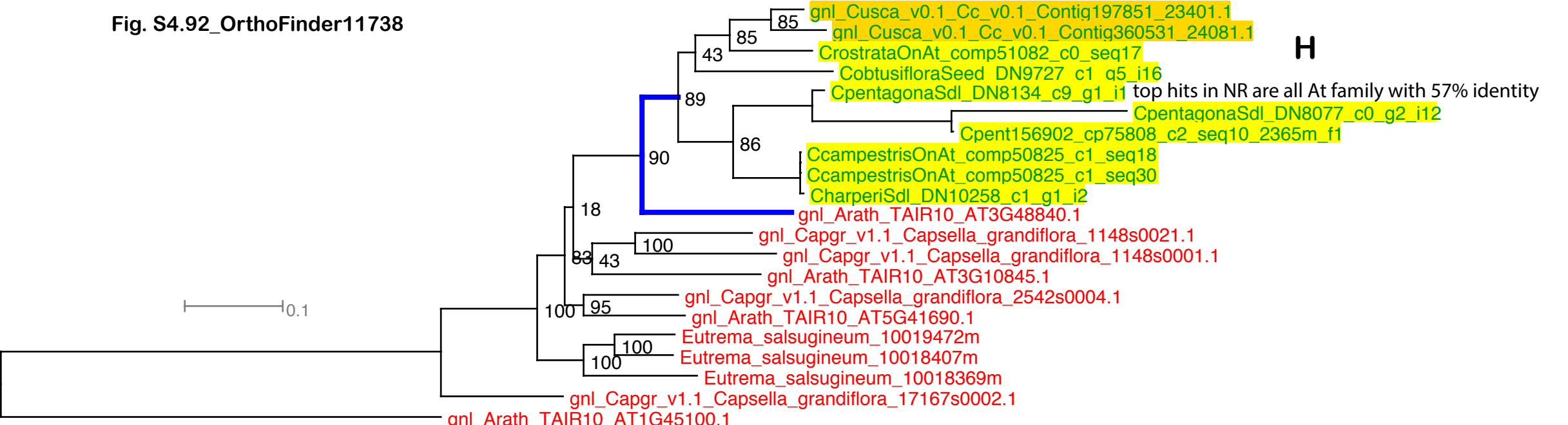
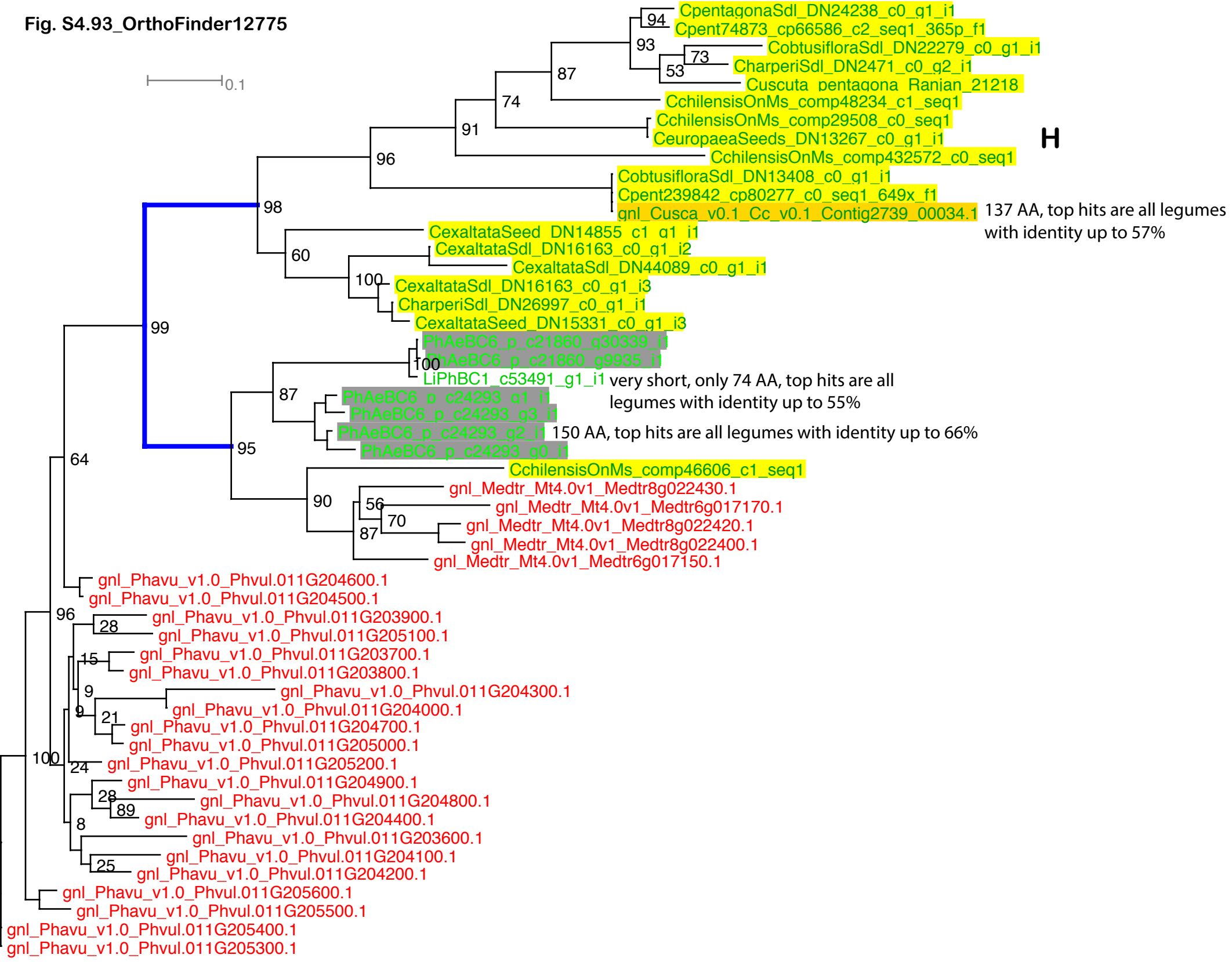


Fig. S4.93_OrthoFinder12775



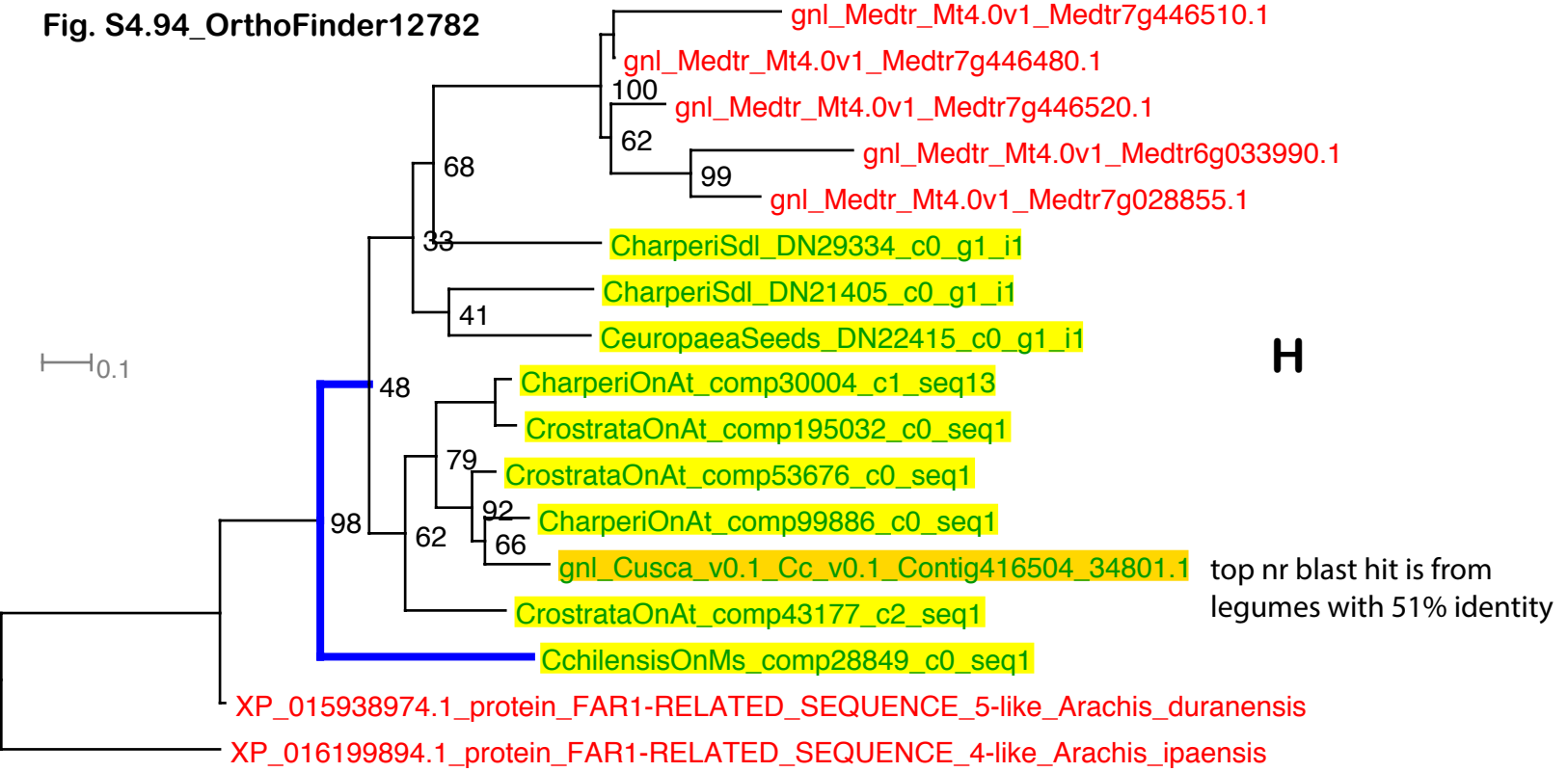


Fig. S4. 94 phylogenetic trees with evidence for HGT in *Cuscuta*. The first figure depicts an unresolved phylogenetic tree with major angiosperm lineages given in coloured font and taxon code for the species used in the 94 trees supporting HGT events in 91 Ortho nder groups. Different angiosperm lineages are coloured according to the colour code system in Fig. 2d. Parasitic Orobanchaceae sequences that were vertically transmitted are highlighted with green background and labeled with "V". The inferred HGT node is highlighted with a blue line and yellow highlighting for the *Cuscuta* sequences and labeled with "H". Other supplementary figures follow the same taxon code as shown in the beginning of this file.