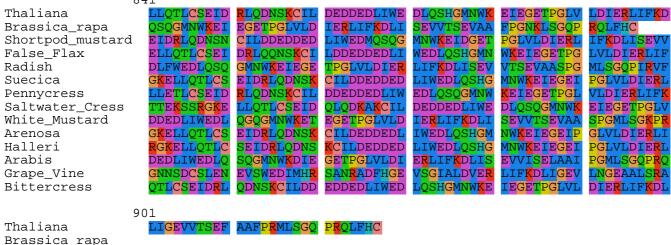


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Thaliana Brassica_rapa Shortpod_mustard False_Flax Radish Suecica Pennycress Saltwater_Cress White_Mustard Arenosa Halleri Arabis Grape_Vine Bittercress	RSSCSPEPQE SAKSSCSPEP RSNSFRSAKS NSFRSAKSSC SPEPQELVTG SFRSARSSYS SARSSCSPEP SNSFRSARSS RSSCSPEPQE SFRSARSSCS NSFRSARSSY RTTSSVVAKL GSASELKSNY RYSCSPEPQE	LVTGHRRTTS QELVTGHRRT SCSPEPQDFV SPEPQEVVTG HRRTTSSVVA TEPQELVTGH RELVTGHRRT CSPEPQEFVT LVTGHRRTTS PEPQELVTGH STEPQELVTG MGLEVIPDES LPQQEPGSNK LVAGHRRSTS	SVVAKLMGLE TSSVIAKLMG TTGHRRTTSS HRRTTSSVVA KLMGLEFIPD RRTTSSVVAKLMG GHRRTTSSVV SVVAKLMGLE RRTTSSVVAK HRRTTSSVVA VTDQSRENRF RPSGVVAKLM SVIAKLMGLE	VIPDEPVTIQ LDVVSDEPVT VVAKLMGLDV KLMGLEVIPD ESVTDQVREN LMGLEVIPDE LEGIPDEPVT AKLMGLEVIP VIPDESITDQ LMGLEVIPDE KLMGLEVIPD CDSPRPPFRV GLDAFPDSSI VIPDESATDQ	NRENRFCDSP DQSRENHFCD ILDEPVADQS EPVVAVQDRE RFCDSPRPTS PVTVHNRENR DQNREIQNRF DESVNDQNRG NRENRFCDSP PVTVHNRENR EPVTVHNRENR EADLQRSRSS SSKAAGESKQ NRENRFCDSP	RPTSRVEVDL SPRPAPRVEA RENHFCDSPR NRFCDSPRPT RVDADLQRSR FCDSPRPASR CDSPRPTFRP NQNRFCDSPR RPTSRVQADL FCDSPRPASR RFCDSPRPASR
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Thaliana Brassica_rapa Shortpod_mustard False_Flax Radish Suecica Pennycress Saltwater_Cress White_Mustard Arenosa Halleri Arabis Grape_Vine Bittercress	QRSRGFDSIK DLPRSRGSDS PPRVEADLQR SRVDIDLQRS SSDPIKKMMP VEEDLQRSRG EAELQRSRSS PTSRAEADLQ QRSRSSDSIK VEEDLQRSRG RVEEDLQRSRG APWTQVDVTK HKDPVSPRLR QRSRSSDSIK	KMMPAKFPMK FKKMMPAAKF SRSSDSFKKM RSSDSIKTMM VKFPMAAVDA SDSFKKMMTA DSAKRMMPFP RSRNSDSVKK KMMPAKFPVK SDSFKKMMTA GSDSFKKMMTA GSDSFKKMMTA NQVKAADAAT NAGSVMKPTS KMMMPAKFPM	ASPWAQVDGA PAKTAPWTQA MSAKFPMKNA PAKFPMKVAP ATTVTVYGEI TFPMAKASPR MKAAPWSQVD MMPAKFPMKA AAPWTQVDGA KFPMKASPW AKFPMKASPW TLTVYGEIQK TSRFPIEPAP KVAPWTQVDG	KNQVKIPDAT DGARNQVKAA PWTQVDGAKNQ WTQVDGAKNQ QKRLSQLEFK AQVDCAKNQV GAKNQVKAAD APWSQVDGAK KNQFKAIDAA QVDCAKNQVK AQVDCAKNQV RLSQLEFKKS WKQLDGSQGP AKNQAKAADA	TLTVYGEIQK DAAATLTVYG QVKAADAAAT VKAADATTLT KSEKDLSALK KAADATTLTV AAATLTVYGE TQGIAADAAT TTVTVYGEIQ AADATTLTVY KAADATTLTVY KAADATTLTVY CKDLRALKQI QKPTFKHREA TTLTVYGEIQ	RLSQLEFKKS EIQKRLSQLE LTVYGEIQKR VYGEIQKRLS QILEAMETTQ YGEIQKRLSQ IQKRLSQLEF TLTVYGEIQK KRLTHLEFKK GEIQKRLSQL YGEIQKRLSQL YGEIQKRLSQL LEAMEKTHQL ATKTLNSTPS KRLSQLEFKK
2	<i>C</i> 1					
Thaliana Brassica_rapa Shortpod_mustard False_Flax Radish Suecica Pennycress Saltwater_Cress White_Mustard Arenosa Halleri Arabis Grape_Vine Bittercress	61 EKDLRALKQI FKKSEKDLRA LSQLEFKKSE QLEFKKSEKD KLINKDDDNN LEFKKSEKDL NKSEKDLSAL RLSQLEFKKS SEKDLRALKQ EFKKSEKDLR LEFKKSEKDLR LEFKKSEKDLR LEFKKSEKDLL TSKDDDNNTL IYGEIEKRLT SEKDLRALKQ	LEAMEKTQQL LQQILEAMEK KDLRALQQIL LRALQQILEAM TLSSTNFMQP RALQQILEAM KQILEAMEKT EKDLRALKQI ILEAMEKTQK ALKQILEAME RALKQILKAM SSTTFMQRAD ELEFKKSGKD ILEAMEKTHQ	ISKDDDDNKT TQQLMSKDDD EAMEKTQQLI MEKTQHLISK VPSAATTSPP EKTQQLISKD QQLVSKDDDD LEAMEKTQQL LISKDDDNNT KTQQLISKDD EKTQQLISKD QPIPFATTSP LRALKRILEA LINKDDDDNK	LCSSNFMQRN NSSLSSTNFM SKDDDNSSLS DDDNKTNFMQ SKSSRSSSTV DDNKNLCSTN NNTLRSTSFM ISKDDDNSSL LRSTNCLQPI DNKNLCSTNF DDNKILCSTNF DDNKILCSTNF MQKTKETIEA TLSSTNFMQR	NQPIPSAINT QPSPSSKSIR TSFMQPSPSP GTDQPVPSAT FMQRTDQPIP KQIPPATTSP SSTNFMQRAD PSAATASGFK MQRTDQPIPS FMQRTDQPIPS FMQRTDQPIP VVMKAATAPV KKDHNSNSVS TDNPIPSATS	SSMNFKSSSI SSSIVVMKAA KSIRSSSIVV SPSSKNFKAS ETGNYGSASY SATNPPSKNF SSKNFRSSSI QPIPSATTSP ETGSYGSASF ATNPPSKNFK SATNPPSKNFK SATNPPSKNFF FKETGNSGSA QTSNRTSSPT PSSKNFRSSS
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Thaliana Brassica_rapa Shortpod_mustard False_Flax Radish Suecica Pennycress Saltwater_Cress White_Mustard Arenosa Halleri Arabis Grape_Vine Bittercress	VVMKAATAPV SAPVFKETGS MKAATAPVFK SIVVMKVAAA SPRSVTLPSV KSSSIVVMKA VVMKAAAAPP SSSKNLRSS SPRSVTLPND SSSIVVMKAA KSSSIVVMKA KSSSIVVMKA FSPRNVALPN SFKSPIVIMK IVVMKAATAP	FKDTGIAGSA SSSTSSSPRS ETGNSSSTSS PVFKETGISG KVSNQRQSQR AAAPVFKETG VFKETGSSGS IVVMKAAEAA KVTTNLRQSQ AAPVFKETGI AATPVFKETG VKVGNLRQKQ PAKLIEKSHN VFKETGISDS	SFSPRNVALP VALPNVKVSN SPRTVALPNV SASFAPRNVA VNPKKQSAMD ISGSASFSPR ASFSPRSVAL VFKETGNCGS KVTPRKQSAM SGSASFSPRN ISGSASFSPRN ISGSASFSPR KVIPRKQSAM LASSAIPIDG ASFSPKNVAL	NVKVGNLRQA QKGTTRKQSA KVSNLRQNQK LANVKVGNLR VTPRPGVYKG NVALPNVKVG PNVKVGNLRQ TSFSPRSVAL DVTPRPGVYK VALPNVKVGN NVALPNVKVGN NVALPNVKVG DVTPRPGFYK LSGLPRLQTG PNVKVGNLRQ	QKVIPRKQSA MDVTPRPATK VIPRKQSAMD QTQNVIPRKQ QTDSPTKNTG NLRQTQKVIP PQKVAPRKQS PNVKVANLRQ GQTDSPTKNT LRQTQKVIPR NLRQTQKVIPR NLRQTQKVIPR GQTDSATKNT DLVGSRKDSV TQKAIPRKQS	MDVTPRPGYY NTSTRPLQSK VTPRPGFYKG SAMDVTPRPG SRQLLPKNEM RKQSAMDETS AMDVTPRPGF TQKVTQRKQS GSRQLLSKNE KQSAMDETSR RKQSAMDETSR RKQSAMDETS ITRQLQQKSD DKQTAKDLTP AMDVTPRPGF
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Thaliana Brassica_rapa Shortpod_mustard False_Flax Radish Suecica Pennycress Saltwater_Cress White_Mustard Arenosa Halleri Arabis Grape_Vine Bittercress	KGQTESTMKN IEMAKSGKPS QTDSPTKNTT FYKGQTDSTM AKSGKPSVSP RPGFYKGQTD YKGQADSATK GMDVTPRPGF MAKSGKRQKP PGFYKGQTDS RPGFYKGQTDS RPGFYKGQTDS RPGFYKGQTD MAKSGKSQMP RNKHLKEPSS YKGQTDSNTT	TRPMQSKIEM KSASTRPLQS RTQSKKLGLE SKMKNTSTRL NTSTRLLQSK	DMAKSGKIQK GFEKQSRPTS AKSGKSQKPS KNDMAKSGKI KQSRPTSPKP LQSKSDMARS SDMAKSGKSQ NTTTRPLQSK LGFEKQSRPT QSKSDMARSG LQSKSDMARSG LQSKSDMARSG LQSKSDMARSG LQSKSDMARSC KSDMARSC LGFEKQSRPT ADRSSRLTKT KSDMAKSGKS	PSVSLRTPPK PKPEPNKNQR VSPRTQPKKL QKPSVSPRTP EQNRIQRQKL GKIQKPSVSP KPSVSPRTPP SDMMRSGKSQ SPKPELNKIQ KLQKPSVSPR KIQKPSVSPR KIQKPSVSPR SPKREPNKIQ SKVHQKINEN QKPSVSPRTP	KLGFEKQSRP QQLSRQQTES GFEKQSRPTS PKKLGFEKQS SRQQTESASP RTPPKKLGFE KKLGFEKQSR KPSVSPRTQP RQQLSSQQTE TPPKKLGFEK TPPKKLGFEK RQQLSSQQTE ETSSSGRNSG PKKFGFEKQS	TSPKPELNKN PSPRRKPGMK PKPEPNKNQR RPTSPKPEPN RKKPRSVQQS KQSRPTSPKP PTSPKPEPNK KKLAFEKQSR SASPRRKPGI QSRPTSPKPE QSRPTSPKPE SAFPRKKTGS AVSPRLQQKK RPTSPKSEPN

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Thaliana Brassica_rapa Shortpod_mustard False_Flax Radish Suecica Pennycress Saltwater_Cress White_Mustard Arenosa Halleri Arabis Grape_Vine Bittercress	QRQQLSRQQT SRGLQQSEDR QQLSRQQTES KTQRQQLSRQ EDRLSDESSD EPNKIQRQLSRQQ PTSPKPEPNK TSRSMQQSVD PNKIQRQLSR PNKIQRQLSR PNKIQRQLSR KSRGLQQSED LELDKQSRST KIQRQQLSKQ	ESASPRRKPG SSDESSDLRS ASPRRKPPMK QIESASPRRK WRSLRSDSNV RQQTESASPR TESASPRRKP IQRQQLSRQQ RLSDESSDLR QQTESASPRR QQTESASPRR RLSDESSDLR TPSPESSRVR QTESASPRRK	IKSRGLQQSE LRSDSNVSSA SRGMQQSEDR QGIKSRGLHQ SSASNLDSEV RKPGIKSRGL GTKTRGLQQS TESASPRRKP SLRSDSNVSS KPGIKSRGLQ KPGIKSRGLQ SLRSDSNVSL RQSSRQLTEP QGIKSRALQQ	DRLSDESSDL SNFDIEVTSR LSDEGSDLRS SEDRLSDESS TSRYKYERNS QQSEDRLSDE EDRLSDESSD GIKSRVQQQS ASNLDSEATS QSEDRLSDES QSEDRLSDES QSEDRLSDES SSEDRLSES ASNLDIEVTS SSPARKLRQR SEDRLSDESS	RSLRSDSNVS HKCDLTEQHT LRSDSNLSSA DLRSQRSDSN DFTEQHTPKQ SSDLRSLRSD LRSLRSDSNV EDHFSDETSD RYRYERNSDF SDLRSLRSDS SDLRSLRSDS RYRSERNSDI APNLLQSDDQ DLRSLRSDSN	LASNLDTEVT PKQRSPELGM SNLDTEVTSR VSLASNLDTE RSPELGMRSL SNVSLASNLD SLASNVDMDV LRSLRSDSNI TEQHTPKQRS NVSLASNLDT NVSLASNLDT TEQYTPKQRS LSEISGDSRN VSLTSNLDIE			
6 Thaliana	01 SRYNYERNSD	ITEOHTPKOR	CDDI CMPCI C	KPLKVTVEQP	SPVSVLDVAF	DEDDSPSPVR			
Brassica_rapa Shortpod_mustard False_Flax Radish Suecica Pennycress Saltwater_Cress White_Mustard Arenosa Halleri Arabis Grape_Vine Bittercress	RSLPKPLKIT YKCDLTEQHT VTSRYNFERN PKPLKVTVEQ TEVTSRYNYE TSRYKYERNS SLTSNLDIEG PEFGMRSLPK EVTSRYNYER EVTSRYNYER PDLGMKLLPK LSYQVTSIDR VTSRYKYERN	VEQPSPVSIL PKQRSPELGM SDIIEQHTPK PSPVSVLDVA RNSDITEQHT DIAEQHTPKQ TSRYKYERNN PLKVTVEQPS NSDITEQHTP NSDITEQHTP PLKVTVEQPS SGGINSISFQ SDIMEQHTPK	SPDLGMRSLS DVAFDDDESP RSLPKPLKIT QKSPELGMRS FDEDESPSPV PKQRSPDLGM RSPDLGMRSL DITEQHTPKQ PVSVLDVAFD KQRSPDLGMR KQRSPDLGMR PVSVLDVAFD HGGQKHKNGD QRSELGMRSL	SPURKISIVE VEQPSPVSIL LPKPLKVTVE RKISVVFKDD RSLPKPLKVTVEQ RSPELGMRSL EDESPSPVRK SLPKPLKVTV SLPKPLKVTV EDESPSPVRK GTMTKFATAT PKPLKLTVEQ	KDDDHIRSEE DVTFDDDESP QPSPVSVLDV DHLRSEESEW VEQPSPVSVL PSPVSVLDVA PKPLKITVEQ ISVVFKDDDH EQPSPVSVLD EQPSPVSVLD ISIVFKDDNL QEQPSPVSVL PSPVSVLDVA	SLWMKKHNNL SPVRKINIVF AFDEDDSPSP MNKHRTLRRS DVAFDEDESP FDEDESPSPV PSPVSVLDVA LRSEESQWMN VAFDEDESPS VAFDEDESPS SSSEEPQWMN DAAFYKDDLP FDEDESPSV			
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Thaliana Brassica_rapa Shortpod_mustard False_Flax Radish Suecica Pennycress Saltwater_Cress White_Mustard Arenosa Halleri Arabis Grape_Vine Bittercress	KISIVFKEDD CRSIVWPESN KDDDHLRSEE VRKISIFKED IVWPETESNG SPVRKISIVF RKISIAFKED FDEDESPSPV KHRTLRRSIV PVRKISIVFK PVRKISIVFK KHSNLCRSIV SPVKKISNAF RKISIVFKEE	NLSSEESHWM TSLNQPDAVL SQWMSKHNNL DNLSSEESQW SLNQSDAELT KEDANLSYEE HLSYEESQWM RKISIVFKED WPESNGSLNQ EDANLSYEES EDANLSSEES WPESNVSLKQ KDDETLNYDE DNLSSEESQW	NKNNNLCRSI TESFMEEGAD CRSIVWPESN MNKHSSLCRS EGIREEGAEL SQWMNKHNNL NKHSNLCRSI DNLGSEESQW SDAELNEGIM QWMNKHSNLC QWMNKHSNLC PDHNEGYMEE MEWATKLENI MNKQRNLCRS	VWPESNTSLK LRNGDRKYIS TSLNQPDAEL IVWPESNASL NNGDHKYISE CRSIVWPESN VWPESNASPK MNKQRNICRS EEGAELNNGD RSIVWPESNA RSIVWPESNA GVELKNGDHK ENLVQRIREL IVWPESNMSV	QPDAELTEGF EILSASGLLK TESLMEEGAE KQPDAELIEG ILLASGLLRD ATLQPDAELM QPDDELIEGS IVWPENNASK HKYISEILLA TLKQPDAELM TLKQPDAEVM YISEILLASG NSTHNEFSVD KLPDTELIEG	MEDDAEFKNG DIDYSMLSIQ LENGDHKYIS FMEEDAEFKN IDYSMLSIQL EGFMEEEAEF MEEDAKFKNG QPDAEFINGF SGLLEDIDYS EGFMEEEAEF DGFMEEDAEF LLEDIDYSMM LIASLCDKTN FMEEGAELKN			
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Thaliana Brassica_rapa Shortpod_mustard False_Flax Radish Suecica Pennycress Saltwater_Cress White_Mustard Arenosa Halleri Arabis Grape_Vine Bittercress	DHKYISEIML LHQAHLPINP EILSASGLLK GDHKYAAEIL HQAHLPINPS KNGDHKYISEILS MDEGVEFKNG MLSIQLYQAH KNGDHKYISE KNGDHKYISE KNGDHKYVSE SIQLHQAHLP PDHRYISEIL GDHEYISEIL	ASGLLEDIDY DDKYISEILL LPINPSLFFV ILLASGLLED ILLASGFLLE INPSLFFVLE	SMISIQLHQA TSNVTHRGRG LHQAHLPINP YSMISIQLHQ SNVTQHDSKH IDYNMISIQL SMMSIQLHQA ASGLLRDIDY LEQNKTSNAT IDYNMISIQL DIDYSMISIQ QUKTSNVTQQ GLMITKLHQS YSMISIQLHQ	HLPINPSLFF FGQQTANLIG SLFFVLEQSK AHLPINPNLF RGIGFGQQQT HQAHLPINPS HLPINPTLFF SMISIQLHQA QHDKKHKGIG HQAHLPINPS LHQAHLPINP DNKHNSRGFG SHPINPKLFL AHLPINPSLF	VLEQNKTSNV RSRRKLVFDT TGNVRHDNKH FVLEQNKTSN ANLIERSRRK LFFVLEQSKTSNV HLPINPSLFF FGQQTVNLIE LFFVLEQSKT SLFFVLEQNK QQQTTNLIDR VLEQNRDVAN FVLEQNKTSN	SLQDNKHKGR VNEILARKFA RGRGFGQQQA VSLQDNKHKG LVFDTINEIL SNVSPQDNKH SQHDNKHKGR VLEQNKTSNL RSRKLVFDT SNVSPQDNKH TSNVSPQDNKH TSNVSPQDNKH IRKLVFDTI ILNDKYSSQN VSLQDNKHKG			
Thaliana Brassica_rapa Shortpod_mustard False_Flax Radish Suecica Pennycress Saltwater_Cress White_Mustard Arenosa Halleri Arabis Grape_Vine Bittercress	GFGQQQTVNL AEGCTKQPYI ANLIERSRRK RGFGQQQTAN ARKFTAEGCT KGRGFGQQQTANL SLQDDKHKAR MNEILARKFA KGRGFGQQQT HKGRGFGQQQT HKGRGFGQQQT NEILARRFAA TAQSKLQRKL RGFGMANLIE	VERSKRKLIF TSSISPLMKT LVFDNVNEIL LIERSKRKLV KQQPYITTSI VNLIERSKRK MERSRRKLVF GFGQQQTANL AEGCTKQPYI VNLIERSKRK TVNLIERSKRK TVNLIERSKRK EGCTKQTSII IFDVVNEILF RSRRKLVFDT	DTINEILAHR DKSSRGKELL ARKFAAEGCT FDTINEILAR SQLRTTNKSS LVFDTINEIL DTINEILARK IDRSRRKLVF TPSISQLRTT LVFDTINEIL KLVFDTINEIL SSISPLRTTD QKLAFTGSSE INEILARFA	FAAEGCTKQP EALCSEIDRL KQPYITSSIS RFAADGCTKQ KGKELLKTMC AHRFAAEGCT FAAEGCTKQP DTINEILARR SKSSKGKELL AHRFAAEGCT LAHRFAAEGCT LAHRFAAEGCT KSSKGKELLQ PCFLPNKIVR AEGCTKQPSI	SITLSISTQR QDNSNCILDE QLMTTEKSSR PSIISSISPL SEIDRLQDNS KQPSIISSIS SIVSSISRLR FAAEGCTKQP ETMCSEIDRL KQPSIISSIS TKRPSIISSI ILCSEIDRLQ RSQNGQELLR ISSISPLRTT	THEKSSRGEE DDEDLIWEDL GKELLESLCS RITEKNSRGK KCILDDEDDE TQRIPVKSSR TTDKSSRGEE SMISSIRPLR QDNSKCILDE TQRIPVKSSR STQRIPVKSSR DDSNCILDED ELCSEIDQLQ EKSSRGKELL			

Bittercress



Brassica_rapa Shortpod_mustard LSGQPRQLFH TSEVAAFPGM DLISEVVTS **EVAAFPGMLS** GOPROLFHC False_Flax Radish L<mark>RGQPRQLFH</mark> C QLFHC IFKDLIGEVV TSEVAAFPGT Suecica DLISEVVTSE Pennycress AAGMLSG<mark>K</mark>PR LISEVVTSEV Saltwater Cress LDIERLIFKD AAFPKMLSGO PGOLFHS White_Mustard OLFNF SEVAAFPGTL RGQPRQLFHC TSEVAAFPGT LRGQPRQLFH C Arenosa KDLIGEVV IF<mark>K</mark>DLIGEVV Halleri Arabis LFHC Grape_Vine PRGHHYRQI

ICEVVTSEVA AFPGMLSGQP RQLFHC