Supplementary file 2: Amino acid sequences of SsCNGCs and allels.

>SsCNGC1|Sspon.04G0014070-1A

MLRNAKISWNGKQNSRKLHGEEVGGKVEDLISYCLHCWPVLLWSYKEAMAGREERYVRVNSERGHNIFGLLKDRTAGAFSFLGNSSHSEALNKSGPEEKKSKTRVLDPQGPFLQRWNKIFVISCLFAVFVDPLFLYIPVIDGGNNCLYLDKKLETVASILRFFTDIFYLLHMLFQFRTGFIAPSSRVFGRGVLVKDTFAIAKRYISTLFLVDLLAVLPLPQVFVLVVLPTLQGPEVMKAKNVLLYVPRLLRIIPLYLQITRSAGILTETAWAGAAFNLIIYMLASHGFGALWYILSIQREDTCWRQACINQTGCELTSLYCGYHPLTNNSFLQSACPTNSTSNPNPDPKFGIFLPALQNVSQSTSFFEKLFYCFWWGLQNLSSLGQNMKTSTNTLENLFAVFVSTSGLVLFALLIGNVQTYLQSASVRIEEMRVKRRDTEQWMAHRLLPENLKDRIMRHEQYRWQETRGVDEEGLLKNLPKDLRREIKRHLCLSLLMKVPMFENMDEQLLDAMCDRLKPMLYTEGSCIIREGDPVNEMLFIMRGTLESTTTNGGQTGFFNSNVLKGGDFCGEELLTWALDPTSASNLPGSTRTVKTLSEVEAFALRADDLKFVATQFRRLHSKQLQHTFRFYSQQWRTWAACFIQAAWHRYCRKKLEEALYEKEKRLQAAIVSDGTTSLSLGAALYASRFAGNMMRILRRNATRKARLQERVPARLLQKPAEPNFFAEDS\*

>SsCNGC1-2C|Sspon.04G0014070-2C

MFENMDEQLLDAMCDRLKPMLYTEGSCIIREGDPVNEMLFIMRGTLESTTTNGGQTGFFNSNVLKGGDFCGEELLTWALDPTSASNLPGSTRTVKTLSEVEAFALRADDLKFVATQFRRLHSKQLQHTFRFYSQQWRTWAACFIQAAWHRYCRKKLEEALYEKEKRLQAAIVSDGTTSLSLGAALYASRFAGNMMRILRRNATRKARLQERVPARLLQKPAEPNFFAEDS

>SsCNGC1-1P|Sspon.04G0014070-1P

MAGREERYVRVNSERGHNIFGLLKDRTAGAFSFLGNSSHSEALNKSGPEEKKSKTRVLDPQGPFLQRWNKIFVISCLFAVFVDPLFLYIPVIDGGNNCLYLDKKLETVASILRFFTDIFYLLHMLFQFRTGFIAPSSRVFGRGVLVKDTFAIAKRYISTLFLVDLLAVLPLPQVFVLVVLPTLQGPEVMKAKIYYWLLLFYVPRLLRIIPLYLQITRSAGILTETAWAGAAFNLIIYMLASHGFGALWYILSIQREDTCWRQACINQTGCELTSLYCGYHPLTNNSFLQSACPTNSTSNPNPDPKFGIFLPALQNVSQSTSFFEKLFYCFWWGLQNLSSLGQNMKTSTDTLENLFAVFVSTSGLVLFALLIGNVQTYLQSASVRIEEMRVKRRDTEQWMAHRLLPENLKDRIMRHEQYRWQETRGVDEEGLLKNLPKDLRREIKRHLCLSLLMKVPMFENMDEQLLDAMCDRLKPMLYTEGSCIIREGDPVNEMLFIMRGTLESTTTNGGQTGFFNSNVLKGGDFCGEELLTWALDPTSASNLPGSTRTVKTLSEVEAFALRADDLKFVATQFRRLHSKQLQHTFRFYSQQWRTWAACFIQAAWHRYCRKKLEEALYEKEKRLQAAIVSDGTTSLSLGAALYASRFAGNMMRILRRNATRKARLQERVPARLLQKPAEPNFFAEDS\*

>SsCNGC2-1A|Sspon.08G0008040-1A

MRRRPRDRKREASSHFSPNSTRLPSPASKGKGRARVPKSKPELNLKKMMMGREDKYVRFQDWRSEQSVSSENIVAPYRDDVSVFSSLKERTARVFALLGNLLHSETSNRSMLDERKSATGTLHPQGPFLQKWNRIFVISCIFAVSVDPLFLYIPVISDEKPCWYLDRKLEKAASVLRFFTDIFYILHIIFQFRTGFIASSPTTFGRGVLIEDRYAITKRYLSTYFFIDVFAILPIPQVIILVLLPNLQGLKIMKAKNVLLLIIICQYVPRLIRIRPLYLQITRSAGVITETARAGAAFNLLLYMLASHKFVKNSTRDKRGILHLQSADYEQRPVSGTQTQPKR\*

>SsCNGC2|Sspon.08G0008040-1P

MPLPGRAVLLAAAVESTPYLPLPPRPVHPPHAAKTVTVSAKLHRISPQTPPAYPARLEGERTRPRPQVQTRGRKKVWPHAEGSGGNEFTKAKFEENDDGKRGQICEISGLEIRASVSSENIVAPYRDDVSVFSSLKERTARVFALLGNLLHSETSNRSMLDERKSATGTLHPQGPFLQKWNRIFVISCIFAVSVDPLFLYIPVISDEKPCWYLDRKLEKAASVLRFFTDIFYILHIIFQFRTGFIASSPTTFGRGVLIEDRYAITKRYLSTYFFIDVFAILPIPQVIILVLLPNLQGSKIMKAKNVLLLIIICQYVPRLIRIRPLYLQITRSAGVITETARAGAAFNLLLYMLASHKFVKNSTRDKRAILHLQSADYEQRPVLGALWYLLSIQRQDSCWRQQCRSNPTCDLAYLYCGDYDNNVKNTFLTTICLPSNQSNLPDPYFGIYAPAIKNVSQSKSFFAKLFFCVWWGLQNLSSLGQNLKTSTYAWENLFAVFVSISGLVLFALLIGNVQTYLQSASLRIEEMRVKSRDTDQWMSYRHLPENLKERIRRYEQYRWQETSGVDEEQLLMNLPKDLRRDIKRHLCLSLLMRVPLFENMDDQLLDAMCDCLKPILYTEGSCVIREGDPVNEMLFVMRGNLMSMTTNGGRTGFFNSDVLKAGDFCGEELLTWALDPTSTSSLPSSTRTVKTMSEVEAFALRAEDLRFVATQFRRLHSKQLQHTFRFYSQQWRTWAACFIQAAWHRYCRKKIEDSLREKEKRLQFAIANDSSTSLSFMAALYASRFAGNMIRILRRNATRKARLQERVPARLLQKPAEPNFSAEEQ\*

>SsCNGC2-2B|Sspon.08G0008040-2B

FQDWRSEQSVSSENIVAPYRDDVSVFSSLKERTARVFALLGNLLHSETSNRSMLDERKSATGTLHPQGPFLQKWNRIFVISCIFAVSVDPLFLYIPVISDEKPCWYLDRKLEKAASVLRFFTDIFYILHIIFQFRTGFIASSPTTFGRGVLIEDRYAITKRYLSTYFFIDVFAILPIPQVIILVLLPNLQGSKIMKAKNVLLLIIICQYVPRLIRIRPLYLQITRSAGVITETARAGAAFNLLLYMLASHKFVKNSTRDKRESYTCRVQIMNKDLSQALRHNR

>SsCNGC3|Sspon.04G0014080-1A

MKARARVFDPRGPFLKKWNKIFVISCLVSVSVDSLFFYAPAIDGDNSCLYLDDNLQKIASILRSLTDAFYLLRVIYQFRTGFAAPSSSGAFGRGVLVDDMLAIAKRYLSTYFLIDILSILPLPQTYLQSASGHIEEMRVIRRDTEQWMAYRLLPEHIKQRILRHDQYRWQETQGMDEEGLLINLPKDLRRDIKRHLCLSLLMRVPMFENMDDQLLDAMCDRVKPMLYTEGSCIIREGDPVNEMFFIMRGRLESMTTDGGRTGFFNSNVLQGGDFCGEELLTWALDPASGSNLPSSTRTVKTLSELEGFALRAHHLKFVANQYRRLHSKQLRHTFRFYSQQWRTWAACFIQAAWHRYCRRKMEDSLHEKERMFQAAIVTDASSSCSLGAALYAAHFASNM

>SsCNGC3-2B|Sspon.04G0014080-2B

MKARARVLDPRGPFLQKWNKIFVISCLVSVSVDSLFFYAPAIDGDNSCLYLDDNLQKITSILRSLTDAFYLLRVIFQFRTGFAAPSSSGAFGRGVLVDDMLAIAKRSLELFGTFLPYNEKTPVGEKLVITRMVVIWQLYIVETYLQSASGHIEEMRVIRRDTEQWIAYRLLPEHIKQRILRHDQYRWQETQGVDEEGLLINLPKDLRRDIKRHLCLSLLMRVPMFENMDDQLLDAMCDRVKPMLYTEGSCIIREGDPVNEMFFIMRGRLESMTTDGGRTGFFNSNVLQGGDFCGEELLTWALDPASGSNLPSSTRTVKTLSELEGFALRAHHLKFVANQYRRLHSKQLRHTFRFYSQQWRTWAACFIQAAWHRYCRRKLEDSLHEKERMFQAAIVTDASSSCSLGAALYAAHFASNM

>SsCNGC4|Sspon.05G0022360-1B

MPFVIRSPPPLSQRLEESSPRSSVPSEVGGRSTLRSSMPGFGYGSFNALRSFLSGVCKSSGRLKSLGQSLTSGAPKTAFAEDLKSYKRTIFDPQDKILFQMNWVFFSSCLFAVAVDPLFFFLPIINDSNCIGIDKKLAVTSTIIRTVIDFVYLIRVCLQFRTAYVAPSSRVFGTGELVIDPMLIAKRYIKSYFAMDFVALLPLPQIVVWRYLNIPDGPDVLTTKTALVWVVLIQYIPRLFRIFPVTTDLKRTAGVFIETAWAGAAYYLLWFMLAGHNVGTLWYFLTIEREDDCWHLYCDPNVGCNSSYLYCNNNHHGSYDSWLKTNGAQVFNICNGTQDNFNFGIYQQALVSGILRPGNFISKLCYCFWWGLQNLSTLGQGLLTSTYTGEVIFSIAICVLGLILFALLIGNMQSYLQSVAIRLEEMRVKKRDAEQWMHHRSLPPEIRHRVRKYERYRWLETRGVDEESLVQTLPKDLRRDIKRHLCLGLVKRVPLFENMDERLLDAICERLRPALYTENEFILREGDPVDEMHFILHGCLESVTTDGGRSGFFNKVQLKEGSFCGDELLTWALDPKSAANFPVSSRTVKALTEVEAFALCAEELKFVASQFRRLHSRQVQHTFRFYSQQWRTWAACFIQAAWRRYYKRKMAEQRRKEEEAASRPSSSHPSLGATIYASRFAANAMRGVHRLRSKAVPTIVRLPKPPEPDFGVDDAD\*

>SsCNGC4-2D|Sspon.05G0022360-2D

MAVLEESSPRSSVPSEVGGRSTLRSSMPGFGSSFNALRSFLSGVRKGSGRLKSLGQSLTSGAPKTAFAEDLKSYKRTIFDPQDKILFQMNWVFFSSCLFAVAVDPLFFFLPIINDSNCIGIDKKLAVTSTIIRTVIDFVYLIRVCLQFRTAYVAPSSRVFGTGELVIDPMLIAKRYIKSYFAMDFVALLPLPQIVVWRYLNIPDGPDVLTTKTALVWVVLIQYIPRLFRIFPVITDLKRTAGVFIETAWAGAAYYLLWFMLAGHSYLQSVAIRLEEMRVKKRDAEQWMHHRSLPPEMRHRVRKYERYRWLETRGVDEESLVQTLPKDLRRDIKRHLCLGLVKRVPLFENMDERLLDAICERLRPALYTENEFILREGDPVDEMHFILHGCLESVTTDGGRSGFFNKVQLKEGSFCGDELLTWALDPKSAANFPVSSRTVKALTEVEAFALCAEELKFVASQFRRLHSRQVQHTFRFYSQQWRTWAACFIQAAWRRYYKRKMAEQRRKEEEAASRPSSSHPSLGATIYASRFAANAMRGVHRLRSKAVPTIVRLPKPPEPDFGLDDAD\*

>SsCNGC5|Sspon.01G0024280-1A

MSYDQSAFQMDYVGVGAGAGVGVSASRRRFMPSESLARGVITHGSAQLRTIGRSIRAGATMAAVFQEDLKNTSRRIFDPQDPVLVRLNRAFLISCIVAIAVDPMFFYLPMVTDEGNLCVGIDRWLAVSTTVVRSVVDLFFVGRIALQFRTAYIKPSSRVFGRGELVIDTALIARRYMRRFFSADLASVLPLPQVVIWKFLHRSKGTAVLDTKNSLLFIVFIQYVPRVVRIYPISSELKRTSGVFAETAYAGAAYYLLWYMLASHIVGAFWYLLSIERVSDCWRNACDEFPGCNQIYMYCGNDRHLGFLEWRTITRQHPPFNYGIYSPAVTSDVLKTKDTTSKLLFCLWWGLANLSTLGQGLKTSIYTGEALFSIALAIFGLILMAMLIGNIQTYLQSLTVRLEEMRVKQRDSEQWMHHRLLPPELRERVRRYDQYKWLNTHGVDEEALVQNLPKDLRRDIKRHLCLGLVRRVPLFANMDERLLDAICERLKPSLCTERTYITREGDPVDQMVFIIRGSLESITTDGGRTGFYNRSLLEEGDFCGEELLTWALDPKAGACLPSSTRTVMALSEVEAFALHAEELKFVAGQFRRMHSKAVQHTFRFYSQQWRTWAATYIQAAWRRHLKRRAAELRRREDEEMEEDEGKSNRIRTTILVSRFAANAMRGVHRQRSRRAVAVPVPVPELLMPMPKPREPDFRDDY\*

>SsCNGC5-2B|Sspon.01G0024280-2B

MSYDQSAFQMDYVGVGAGAGVGVSASRRRFMPSESLARGVITHGSAQLRTIGRSIRAGATMAAVFQEDLKNTSRRIFDPQDPVLVRLNRAFLISCIVAIAVDPMFFYLPMVTDEGNLCVGIDRWLAVSTTVVRSVVDLFFVGRIALQFRTAYIKPSSRVFGRGELVVIWKFLHRSKGTAVLDTKNSLLFIVFIQYVPRVVRIYPISSELKRTSGVFAETAYAGAAYYLLWYMLASHIVGAFWYLLSIERVSDCWRNACDEFPGCNQIYMYCGNDRHLGFLEWRTITRQVINETCEPKQDGSIPPFNYGIYSPAVTSDVLKTKDTTSKLLFCLWWGLANLSTLGQGLKTSIYTGEALFSIALAIFGLILMAMLIGNIQTYLQSLTVRLEEMRVKQRDSEQWMHHRLLPPELRERVRRYDQYKWLNTHGVDEEALVQNLPKDLRRDIKRHLCLGLVRRVPLFANMDERLLDAICERLKPSLCTERTYITREGDPVDQMVFIIRGSLESITTDGGRTGFYNRSLLEEGDFCGEELLTWALDPKAGACLPSSTRTVMALSEVEAFALHAEELKFVAGQFRRMHSKAVQHTFRFYSQQWRTWAATYIQAAWRRHLKRRAAELRRREDEEIEEDEGKSNRIRTTILVSRFAANAMRGVHRQRSRRAVAVAVPELLMPMPKPREPDFRDDY\*

>SsCNGC5-3C|Sspon.01G0024280-3C

MSYDQSAFQMDYVGVGAGAGVGVSASRRRFMPSESLARGVITHGSAQLRTIGRSIRAGATMAAVFQEDLKNTSRRIFDPQDPVLVRLNRAFLISCIVAIAVDPMFFYLPMVTDEGNLCVGIDRWLAVSTTVVRSVVDLFFVGRIALQFRTAYIKPSSRVFGRGELVIDTALIARRYMRRFFSADLASVLPLPQVVIWKFLHRSKGTAVLDTKNSLLFIVFIQYVPRVVRIYPISSELKRTSGVFAETAYAGAAYYLLWYMLASHIVGAFWYLLSIERVSDCWRNACDEFPGCNQIYMYCGNDRHLGFLEWRTITRQVINETCEPKQDGSIPFNYGIYSPAVTSDVLKTKDTTSKLLFCLWWGLANLSTLGQGLKTSIYTGEALFSIALAIFGLILMAMLIGNIQTYLQSLTVRLEEMRVKQRDSEQWMHHRLLPPELRERVRRYDQYKWLNTHGVDEEALVQNLPKDLRRDIKRHLCLGLVRRVPLFANMDERLLDAICERLKPSLCTERTYITREGDPVDQMVFIIRGSLESITTDGGRTGFYNRSLLEEGDFCGEELLTWALDPKAGACLPSSTRTVMALSEVEAFALHAEELKFVAGQFRRMHSKAVQHTFRFYSQQWRTWAATYIQAAWRRHLKRRAAELRRREDEEMEEDEGKSNRIRTTILVSRFAANAMRGVHRQRSRRAVPELLMPMPKPREPDFRDDY

>SsCNGC5-4D|Sspon.01G0024280-4D

MSYDQSAFQMDYVGVGAGAGVGVSASRRRFMPSESLARGVITHGSAQLRTIGRSIRAGATMAAVFQEDLKNTSRRIFDPQDPVLVRLNRAFLISCIVAIAVDPMFFYLPMVTDEGNLCVGIDRWLAVSTTVVRSVVDLFFVGRIALQFRTAYIKPSSRVFGRGELVIDTALIARRYMRRFFSADLASVLPLPQVVIWKFLHRSKGTAVLDTKNSLLFIVFIQYVPRVVRIYPISSELKRTSGVFAETAYAGAAYYLLWYMLASHIVGAFWYLLSIERVSDCWRNACDEFPGCNQIYMYCGNDRHLGFLEWRTITRQVINETCEPKQDGSIPPFNYGIYSPAVTSDVLKTKDTTSKLLFCLWWGLANLSTLGQGLKTSIYTGEALFSIALAIFGLILMAMLIGNIQTYLQSLTVRLEEMRVKQRDSEQWMHHRLLPPELRERVRRYDQYKWLNTHGVDEEALVQNLPKDLRRDIKRHLCLGLVRRVPLFANMDERLLDAICERLKPSLCTERTYITREGDPVDQMVFIIRGSLESITTDGGRTGFYNRSLLEEGDFCGEELLTWALDPKAGACLPSSTRTVMALSEVEAFALHAEELKFVAGQFRRMHSKAVQHTFRFYSQQWRTWAATYIQAAWRRHLKRRAAELRRREDEEMEEDEGKSNRIRTTILVSRFAANAMRGVHRQRSRRAVPELLMPMPKPREPDFRDDY\*

>SsCNGC6|Sspon.02G0031610-1A

MSGCGYRTQFINGRREKFVRLVEADEPAESATSPTSGSGGATMEHGHGNGGGHGGGGGGFHMDSYFSGNPSAAAAKFRARSVRVAAGVKNRSERLRSIGLVFQEDFRKMSQQVFDPQDAFLARMNRAFVFACIVSVAIDPLFLYLLAVKYTDKNTCIGFDRNLATVATVVRTAVDAFYLARIALQFRTAYIAPSSRVFGRGELVIDSSAIARRYLRRFFVVDLLSVLPLPQVSIWNFLNRPKGADLLPTKNALLFTVLSQYVPRLVRFYPITSELKRTTGVFAETAFGGAAFYLLLYMLASHMVGAFWYLLAIERLDDCWRDKCTKLNFHQCRTYMYCGGGSQGQSGFLEWRTMIRQVLAQECAPVDGSGTGFPYGIYTTAIQSGVYSTENLTAKILFCLWWGLQNLSTIGQGLETTHYKGEQLFSITLALLGLILMALLIGNMQTYLQSMTLRLEEMRLKRRDSEQWMHHRVLPDELRERVWRHNQYKWLETRGVDEDSLVRSLPKDLRRDVKRHLCLRLVRRVPLFANMDERLLDAICERLKPSLCTESTYIVREGDPVDEMLFIIRGRLESSTTDGGRMGFYNRGLLKEGDFCGEELLTWALDPKAGTNFPLSTRTVRAISEVEAFALRADELKFVAGQFRRLHSKQLQQTFRFYSQQWRTWASCLIQAAWRRYLKRKAAEQRRREEEMEADEAAASGVSTSRFKTTLLVSRFAKNAMRGVQRQRSVRADSLIMLPRPPEPDFGSMDY\*

>SsCNGC6-2D|Sspon.02G0031610-2D

MFGCGYRTQFINGRREKFVRLVEADAPAESATSPTSGSGGATMEHGHGNGGGHGGGGGGFHMDSYFSGNPSAAAAKFRARSVRVAAGVMNRSERLRSIGLVFQEDFRKMSQQVFDPQDAFLARMNRAFVFACIVSVAIDPLFLYLLAVKYTDKNTCIGFDRNLATVATVVRTAVDAFYLARIALQFRTAYIAPSSRVFGRGELVIDSSAIARRYLRRFFVVDLLSVLPLPQVSIWNFLNRPKGADLLPTKNALLFTVLSQYVPRLVRFYPITSELKRTTGVFAETAFGGAAFYLLLYMLASHMVGAFWYLLAIERLDDCWRDKCTKLNFHQCRTYMYCGGGSQGQSGFLEWRTMIRQVLAQECAPVDGSGTGFPYGIYTTAIQSGVYSTENLTAKILFCLWWGLQNLSTIGQGLETTHYKGEQLFSITLALLGLILMALLIGNMQTYLQSMTLRLEEMRLKRRDSEQWMHHRVLPDELRERVWRHNQYKWLETRGVDEDSLVRSLPKDLRRDVKRHLCLRLVRRVPLFANMDERLLDAICERLKPSLCTESTYIVREGDPVDEMLFIIRGRLESSTTDGGRMGFYNRGLLKEGDFCGEELLTWALDPKAGTNFPLSTRTVRAISEVEAFALRADELKFVAGQFRRLHSKQLQQTFRFYSQQWRTWASCLIQAAWRRYLKRKAAEQRRREEEMEADEAAASGVSTSRFKTTLLVSRFAKNAMRGVQRQRSVRADSLIMLPRPPEPDFGSMDY\*

>SsCNGC7|Sspon.04G0002010-1A

MDCDLFAAWWSSSTRLVSRIFRGSAADAPGPSPMRPAIPLHQKQAGLAASKLGVGTSKKHRAFVASDEQWYNKIFDPSSDFILTWNRIFLFSCFVALFIDPLYFYVPKISYGSPKFCVGTDTRFAVGVTFFRSIADLLYVLHIIIKFRTAYINPSSTLRVFGRGDLVTNPKEIACKYIRSDLVVDVAAALPLPQIIVWFVIPAIKYSSAEHNNNILVLIVLAQYLPRLYLIFPLTYEIVKATGVVAKTAWEGAAYNMVLYLIASHVLGALWYLLSVDRQTFCWKTSCLSETDCHIKYLDCDTTLNATWASTTAVFSKCNASDDTISFDFGMFGPALSNQAPAQSFAMKYFYSLWWGLQNLSCYGQTLSVSTYLGETLYCIFLAVLGLVLFAHLIGNVQTYLQSITVRVEEWRLKQRDTEEWMRHRQLPCELRERVRRFIQYKWLATRGVNEESILQALPADLRRDIKRHLCLGLVRRVPFFAQMDDQLLDAICERLVSSLCTKGTYIVREGDPVTEMLFIIRGKLESSTTNGGRTGFFNSITLKPGDFCGEELLGWALVPRPTTNLPSSTRTVKALIEVEAFALQAEDLKFVASQFRRLHSKKLQHTFRYYSHHWRTWASCFIQAAWRRYKRRKMAKDLSMRESFNSVRLDEVDNEDDDSPPKNNLALKFIARTRKVPQNMKGLPKLTKPDEPDFSAEPED\*

>SsCNGC7-2B|Sspon.04G0002010-2B

MDCDLFAAWWSSSTRLVSRIFRGSAADAPGPSPLRPAIPLHQKQAGLAASKLGVGTSKKHRAFVASDEQWYNKIFDPSSDFILTWNRIFLFSCFVALFIDPLYFYVPKISYGSPKFCVGTDTRFAVGVTFFRSIADLLYVLHIIIKFRTAYINPSSTLRVFGRGDLVTNPKEIACKYIRSDLVVDVAAALPLPQTYLQSITVRVEEWRLKQRDTEEWMRHRQLPCELRERVRRFIQYKWLATRGVNEESILQALPADLRRDIKRHLCLGLVRRVPFFAQMDDQLLDAICERLVSSLCTKGTYIVREGDPVTEMLFIIRGKLESSTTNGGRTGFFNSITLKPGDFCGEELLGWALVPRPTTNLPSSTRTVKALIEVEAFALQAEDLKFVASQFRRLHSKKLQHTFRYYSHHWRTWASCFIQAAWRRYKRRKMAKDLSMRESFNSVRLDEVDNEDDDSPPKNNLALKFIARTRKVPQNMKGLPKLTKPDEPDFSAEPED\*

>SsCNGC7-3D|Sspon.04G0002010-3D

MDCDLFAAWWSSSTRLVSRIFRGSAADAPGPSPMRPAIPLHQKQAGLAASKLGVGTSKKHRAFVASDEQWYNKIFDPSSDFILTWNRIFLFSCFVALFIDPLYFYVPKISYGSPKFCVGTDTRFAVGVTFFRSIADLLYVLHIIIKFRTAYINPSSTLRVFGRGDLVTNPKEIACKYIRSDLVVDVAAALPLPQIIVWFVIPAIKYSSAEHNNNILVLIVLAQYLPRLYLIFPLTYEIVKATGVVAKTAWEGAAYNMVLYLIASHVLGALWYLLSVDRQTFCWKTSCLSETDCHIKYLDCDTTLNATWASTTAVFSKCNASDDTISFDFGMFGPALSNQAPAQSFAMKYFYSLWWGLQNLSCYGQTLSVSTYLGETLYCIFLAVLGLVLFAHLIGNVQTYLQSITVRVEEWRLKQRDTEEWMRHRQLPCELRERVRRFIQYKWLATRGVNEESILQALPADLRRDIKRHLCLGLVRRVPFFAQMDDQLLDAICERLVSSLCTKGTYIVREGDPVTEMLFIIRGKLESSTTNGGRTGFFNSITLKPGDFCGEELLGWALVPRPTTNLPSSTRTVKALIEVEAFALQAEDLKFVASQFRRLHSKKLQHTFRYYSHHWRTWASCFIQAAWRWYKRRKMAKDLSMRESFNSVRLDEVDNEDDDSPPKNNLALKFIARTRKVPQNMKGLPKLTKPNEPDFSAEPED\*

>SsCNGC7-1T|Sspon.04G0002010-1T

MDCDLFAAWWSSSTRLVSRIFRGSAADAPGPSPMRPAIPLHQKQAGLAASKLGVGTSKKHRAFVASDEQWYNKIFDPSSDFILTWNRIFLFSCFVALFIDPLYFYVPKISYGSPKFCVGTDTRFAV

>SsCNGC8|Sspon.08G0012670-1A

MRFGSGRVEDEMALTRQRTVRFHDERAKATIPIHHKQHGLAASRLGLGSSGKNKVFVAGDDLWYNKIIDPSSDFILTWIYVFHVSCFIALLMDPLYFYVPEIDYRQTTHCVRKDRRLAIIVTVFRSIADLFYVIQMIIKFRTAYLNPSSNLGVFGRGDLITDPKEIAKQYLRSDFAVDLVASLPLPQIIVWSVIPAIKYSSSEHGNDMLLLVALFQYILRLYLIFSLNDKIVKITGAFAKTAWQGAAYNLLLYMIASHVLGALWYFLSVDRQIACWKSFCNENDCHSRYLYCDVKPDSSWNGTLVFSSCDAKNTNKFDFGMFQPLLSNKTPNESFLKKYIYCLWWGLQNLSCYGQTLNVSTFIGETLYAILLAVVGLVLFAHLIGKVQTYLQSITARVEEWRLKQRDTEEWMRHRQLPHELRERVRRFVHYKWLATRGVDEESILNALPTDLCRDIKRHLCLDLVRRVPLFSQMDDQLLDAICERLVSSLSTEGTYIVREGDPVTEMLFIIRGKLESSTTDGGRTGFFNSITLKPGDFCGEELLGWALVPKPTVNLPLSTRTVKAIVEVEAFALQADDLRFVASQFRRLHSRKLQHTFRYYSHHWRTWAACFIQHAWRRQKRRKMAKDLSMRESFSSMRSYEGDNSPEQNLTLRRGASIIRELPKFRKPSEPDFSAEHDD\*

>SsCNGC8-2B|Sspon.08G0012670-2B

MRFGSGRVEDEMALTRQRTVRFHDERAKATIPIHHKQHGLAASRLGLGSSGKNKVFVAGDDLWYNKIIDPSSDFILTWICVFRVSCFIALLMDPLYFYVPEIDYRQTTHCVRKDIRLAIIVTVFRSIVDLFYVIQMIIKFRTAYLNPSSNLGVFGRGDLITDPKEIAKQYLRSDFAVDLVASLPLPQIIVWSVIPAIKYSSSEHGNDMLLLVAFFQYILRLYLIFSLNDKIVKITGAFAKTAWQGAAYNLLLYMIASHVLGALWYLLSVDRQIACWKSFCNETETDCHTQYLYCDVKPDSSWNGTLVFSSCDAKNTNKFDFGMFQPLLSNKTPNESFLKKYIYCLWWGLQNLSTFIGETLYAILLAVVGLVLFAHLIGKVQTYLQSITARVEEWRLKQRDTEEWMRHRQLPHELRERVRRFVHYKWLATRGVDEESILNALPTDLRRDIKRHLCLDLVRRVPLFSQMDDQLLDAICERLVSSLSTEGTYIVREGDPVTEMLFIIRGKLESSTTDGGRTGFFNSITLKPGDFCGEELLGWALVPKPTVNLPLSTRTVKAIVEVEAFALQADDLRFVASQFRRLHSRKLQHTFRYYSHHWRTWAACFIQHAWRRQKRRKMAKDLSMRESFSSMRSYEGDNSPEQNLALRRGASIIRELPKFKKPSEPDFSAEHDD\*

>SsCNGC8-3C|Sspon.08G0012670-3C

MRFGSGRVEDEMALTRQRTVRFHDERAKATIPIHHKQHGLAASRLGLGSSGKNKVFVAGDDLWYNKIIDPSSDFILTWICVFRVSCFIALLMDPLYFYVPEIDYRQTTHCVRKDIRLAIIVTVFRSIVDLFYVIQMIIKFRTAYLNPSSNLGVFGRGDLITDPKEIAKQYLRSDFAVDLVASLPLPQIIVWSVIPAIKYSSSEHGNDMLLLTYLQSITARVEEWRLKQTDTEEWMRHRQLPHELRERVRRFVHYKWLATRGVDEESILNALPTDLRRDIKRHLCLDLVRRVPLFSQMDDQLLDAICERLVSSLSTEGTYIVREGDPVTEMLFIIRGKLESSTTDGGRTGFFNSITLKPGDFCGEELLGWALVPKLTVNLPLSTRTVKTIVEVEAFALQADDLRFVASQFRRLHSRKLQHTFRYYSHHWRTWAACFIQHAWRRQKRRKMAKDLSMRESFSSMRSYEGDNSPEQNLTLRRGASIIRELPKFRKPSEPDFSAEHDD\*

>SsCNGC8-4D|Sspon.08G0012670-4D

MRFGSGRVEDEMALTRQRTVRFHDERAKATIPIHHKQHGLAASRLGLGSSGKNKVFVAGDDLWYNKIIDPSSDFILTWIYVFHVSCFIALLMDPLYFYVPEIDYRQTTHCVRKDRRLAIIVTVFRSIADLFYVIQMIIKFRTAYLNPSSNLGVFGRGDLITDPKEIAKQYLRSDFAVDLVASLPLPQIIVWSVIPAIKYSSSEHGNDMLLLVALFQYILRLYLIFSLNDKIVKITGAFAKTAWQGAAYNLLLYMIASHVLGALWYFLSVDRQIACWKSFCNENDCHTRYLYCDVKPDSSWNGTLVFSSCDAKNTNRFDFGMFQPLLSNKTPNESFLKKYIYCLWWGLQNLSCYGQTLNVSTFIGETLYAILLAVVGLVLFAHLIGKVQTYLQSITARVEEWRLKQRDTEEWMRHRQLPHELRERVRRFVHYKWLATRGVDEESILNALPTDLCRDIKRHLCLDLVRRVPLFSQMDDQLLDAICERLVSSLSTEGTYIVREGDPVTEMLFIIRGKLESSTTDGGRTGFFNSITLKPGDFCGEELLGWALVPKPTVNLPLSTRTVKAIVEVEAFALQADDLRFVASQFRRLHSRKLQHTFRYYSHHWRTWAACFIQHAWRRQKRRKMAKDLSMRESFSSMRSYEGDNSPEQNLTLRRGASIIRELPKFRKPSEPDFSAEHDD\*

>SsCNGC9|Sspon.02G0036020-1B

MFGSRVQDEVEMQRRPNNRIFPDERQNQPKPLYQTARADRFGANRIDVKNPEKLKVLNEGNKPWHQRILDPGSNIVLRWNRVYLVACLFALFIDPFFYYLPLIRQNDNGYSCVAKDQGLSIRITVLRSLADLFYMLNIAIKFHTAYVDPKSRVLGKGELVVDIKKIQQRYIRTDFFVDILAAVPLPQVTVWLIMPAIKSSDYNIRNTTFALIIVIQYVIRMYLIIPLSNQIIKAVGVVAKSAWGGAAYNLLLYMLASHITGAIYYLLSIERQITCWDQQCVAESNCNLRFISCENSGSDDYSEWAKNTGIFNNCDATTPNNISFNYGMFSSALSKGAVSSPFLEKYFYCLWWGLLQLSSSGNPLVTSAFITENLFAIAIGAISLILFAQLIGKMQTYLQSISKRLEEWRLRQRDMDEWMRHHQLPSHLQERVRRFVQVKWLATRGVEEESILQALPADIRRDVQRHLCLDLVRRVPFFSEMDDQLLDAICERLVSFLCPENTYISREGDPVNEMLFIIRGKLESSTTNGGRSNFFNSIILRPGDFAGEELLTWALLPKTNVHFPLSTRTVRSLTEVEAFALRAEDLKFVANQFRRLHSKKLQHTFRFYSHHWRTWAACFIQAAWRQHQRRKLAESLSRWESYSWWSEDHPTGDKPRQEGTSSGGTRTIAEGAIAQMHKLASASRRFRTEDIAIRRLQKPDEPDFSADHFD\*

>SsCNGC9-2D|Sspon.02G0036020-2D

MFGSRVQDEVEMQRRPNNRIFPDERQNQPKPLYQTARADRFGANRIDVKNPEKLKVLNEGNKPWHQRILDPGSNIVLRWNRVYLVACLFALFIDPFFYYLPLIRQNDNGYSCVAKDQGLSIRITVLRSLADLFYMLNIAIKFHTAYVDPKSRVLGKGELVVDIKKIQQRYIRTDFFVDILAAVPLPQVTVWLIMPAIKSSDYNIRNTTFALIIVIQYVIRMYLIIPLSNQIIKAVGVVAKSAWGGAAYNLLLYMLASHITGAIYYLLSIERQITCWDQQCVAESNCNLRFISCENSGSDDYSEWAKKTGIFNNCDATTPNNISFNYGMFSSALSKGAVSSPFLEKYFYCLWWGLLQLSSSGNPLVTSAFITENLFAIAIGAISLILFAQLIGKMQTYLQSISKRLEEWRLRQRDMDEWMRHHQLPSHLQERVRRFVQVKWLATRGVEEESILQALPADIRRDVQRHLCLDLVRRVPFFSEMDDQLLDAICERLVSFLCPENTYISREGDPVNEMLFIIRGKLESSTTNGGRSNFFNSIILRPGDFAGEELLTWALLPKTNVHFPLSTRTVRSLTEVEAFALRAEDLKFVANQFRRLHSKKLQHTFRFYSHHWRTWAACFIQAAWRQHQRRKLAESLSRWESYSWWSEDHPPGDKPRQEGTSSGGTRTIAEGAIAHMHKLASASRRFRTEDITIRRLQKPDEPDFSADHFD\*

>SsCNGC9-1T|Sspon.02G0036020-1T

MFGSRVQDEVEMQRRPNNRIFPDERQNQPKPLYQTARADRFGANRIDVKNPEKLKVLNEGNKPWHQRILDPGSNIVLRWNRVYLVACLFALFIDPFFYYLPLIRQNDNGSSCVAKDQGLSIRITVLRSLADLFYMLNIAIKFHTAYVDPKSRVLGKGELVVDIKKIQQRYIRTDFFVDILAAVPLPQVTVWLIMPAIKSSDYNIRNTTFALIIVIQYVIRMYLIIPLSNQIIKAVGVVAKSAWGGAAYNLLLYMLASHITGAIYYLLSIERQITCWDQQCVAESNCNLRFISCENSGSDDYSEWAKKTGIFNNCDATTPNNISFNYGMFSSALSKGAVSSPFLDKYFYCLWWGLLQLSSSGNPLVTSAFITENLFAIAIGAISLILFAQLIGKMQTYLQSISKRLEEWRLRQRDMDEWMRHHQLPSHLQERVRRFVQVKWLATRGVEEESILQALPADIRRDVQRHLCLDLVRRVPFFSEMDDQLLDAICERLVSFLCPENTYISREGDPVNEMLFIIRGKLESSTTNGGRSNFFNSIILRPGDFAGEELLTWALLPKTNVHFPLSTRTVRSLTEVEAFALRAEDLKFVANQFRRLHSKKLQHTFRFYSHHWRTWAACFIQAAWRQHQRRKLAESLSRWESYSWWSEDHPPGDKPRQEGTSSGGTRTIAEGAIAHMHKLASASRRFRTEDITIRRLQKPDEPDFSADHFD\*

>SsCNGC10|Sspon.04G0024390-1B

MTFLVLMAEHNVVVSAFPRDQITEQIHVTEQRIQQDQSMFITKAMYASLRNFRFQNEIEVQSFRTSPLQQNLSSRKHGRAHDPRKCRLGFRGGCLEKACRNPTLKDRVLSRAFSEELESLMHAAGSSHLFFDPRGHLIHLWNKIFLSACLLSLFVDPLFLYLTGTQRNNHMCIEFKYSLALTLSMIRSLLDLFYAAHILFRFRTAFIAPSSRVFGRGELVIQPYKIARRYLGRTFWFDLVTALPLPQFVIWIVIPKLNESPTANRKSILRFSIIFQYLPRLFQIFPLTSQIVVATGVVAETAWACAAYNLILYMLASHIDADLIFFSFWTTEPDEYVQVLGALWYLFSVQRQEACWREACLLESPTCQTMFFDCKALSSNRTIWYELSNITSLCTPGNGFYAFGIYEEALHAKLTSSSFTQKYFYCFWWGLKNLSCLGQNLSTSLSIGEITFAIVIGVLGLVLFGLLIGNMQSYLQTTMVRLEEWRTKRTDMERWMHHRQIPQPLKQCVRRYHQYQWVATRGVDEEALLQDLPMDIRRDIKRHLCLDLVRRVPLFDEMDERMLEAICERLRPALYTRGTRLVRELDPVDSMLFIIRGYLDSFTTQGGRSGFFNSCRIGAGEFCGEELLTWALDPRPSAKLPLSTRTVRAVSEVEAFALVADDLRFVASQFRRLHSARIRHRFRFYSHQWRTWAACSIQAAWRRHKRRRASVELRVREGGDVRTAGSLRRSCRHSIDGEASIKKPMEPDFTVEEED\*

>SsCNGC10-2C|Sspon.04G0024390-2C

MYASLRNFRFQNEIEVQSFRTSPLQQNLSSRKHGRAHDPRKCRLGFRGGCLEKACRNPTLKDRVLSRAFSEELESLMHAAGSSHLFFDPHGHLIHLWNKIFLSACLLSLFVDPLFLYLTGTQRNNHMCIEFKYSLALTLSMIRSLLDIFYAAHILFRFRTAFVAPSSRVFGQGELVIQPYKIARRYLGRTFWFDLVTALPLPQFVIWIVIPKLNESLTGTQRNNHMCIEFKYSLALTLSMIRSLLDIFYAAHILFRFRTAFVAPSSRVFGQGELVIQPYKIARRYLGRTFWFDLVTALPLPQFVIWIVIPKLNESLTANRKSILRFSIIFQYLPRLFQIFPLTSQIVMATGVMAETAWACAAYNLILYMLASHVLGALWYLFSVQRQEACWREACLLESPTCQTMFFDCKALSSNRTIWYELSNITSLCTPGNGFYPFGIYAEALQTKLTSSSFTQKYFYCFWWGLKNLSCLGQNLSTSLSIGEITFAIVIGVLGLVLFGLLIGNMQSYLQTTMVRLEEWRTKRTDMERWMHHRQIPQPLKQCVRRYHQYQWVATRGVDEEALLQDLPMDIRRDIKRHLCLDLVRRVPLFDEMDERMLEAICERLRPALYTRGTRLVRELDPVDSMLFIIRGYLDSFTTQGGRSGFFNSCRIGAGEFCGEELLTWALDPRPSAKLPLSTRTVRAVSEVEAFALVADDLRFVASQFRRLHSARIRHRFRFYSHQWRTWAACSIQAAWRRHKRRRASVELRVREGGDVRTAGSLRRSCRHSIDGEASIKKPMEPDFTVEEED\*

>SsCNGC10-3D|Sspon.04G0024390-3D

MASGASRNVRFQNEIEVQSFRTSPLQQNLSSRKHGRAHDPRKCRLGFRGGCLEKACRNPTLKDRVLSRAFSEELESLMHAAGSSHLFFDPRGHLIHLWNKIFLSACLLSLFVDPLFLYLTGTQRNNHMCIEFKYSLALTLSMIRSLLDLFYAAHILFRFRTAFIAPSSRVFGRGELVIQPYKIARRYLGRTFWFDLVTALPLPQFVIWIVIPKLNESPTANRKSILRFSIIFQCLPRLFQIFPLTSQIIMATGVMAETAWACAAYNLILYMLASHIDADLIFFSFWTTEPDEYVQVLGALWYLFSVQRQEACWREACLLESPTCQTMFFDCKALSSNRTIWYELSNITSLCTPGNGFYAFGIYEEALHAKLTSSSFTQKYFYCFWWGLKNLSCLGQNLSTSLSIGEITFAIVIGVLGLVLFGLLIGNMQSYLQTTMVRLEEWRTKRTDMERWMHHRQIPQPLKQCVRRYHQYQWVATRGVDEEALLQDLPMDIRRDIKRHLCLDLVRRVPLFDEMDERMLEAICERLRPALYTRGTRLVRELDPVDSMLFIIRGYLDSFTTQGGRSGFFNSCRIGAGEFCGEELLTWALDPRPSAKLPLSTRTVRAVSEVEAFALVADDLRFVASQFRRLHSARIRHRFRFYSHQWRTWAACSIQAAWRRHKRRRASVELRVREGGDVRTAGSLRRSCRHSIDGEASIKKPMEPDFTVEEED\*

>SsCNGC10-1T|Sspon.04G0024390-1T

MASGASRNVRFQNEIEVQSFRTSPLQQNLSSRKHGRAHDPRKCRLGFRGGCLEKACRNPTLKDRVLSRAFSEELESLMHAAGSSHLFFDPRGHLIHLWNKIFLSACLLSLFVDPLFLYLTGTQRNNHMCIEFKYSLALTLSMIRSLLDLFYAAHILFRFRTAFIAPSSRVFGRGELVIQPYKIARRYLGRTFWFDLVTALPLPQFVIWIVIPKLNESPTANRKSILRFSIIFQCLPRLFQIFPLTSQIIMATGVMAETAWACAAYNLILYMLASHIDADLIFFSFWTTEPDEYVQVLGALWYLFSVQRQEACWREACLLESPTCQTMFFDCKALSSNRTIWYELSNITSLCTPGNGFYPFGIYEEALKTKLTSSSFTQKYFYCFWWGLKNLSCLGQNLSTSLSIGEITFAIVIGVLGLVLFGLLIGNMQSYLQTTMVRLEEWRTKRTDMERWMHHRQIPQPLKQCVRRYHQYQWVATRGVDEEALLQDLPMDIRRDIKRHLCLDLVRRVPLFDEMDERMLEAICERLRPALYTRGTRLVRELDPVDSMLFIIRGYLDSFTTQGGRSGFFNSCRIGAGEFCGEELLTWALDPRPSAKLPLSTRTVRAVSEVEAFALVADDLRFVASQFRRLHSARIRHRFRFYSHQWRTWAACSIQAAWRRHKRRRASVELRVREGGDVRTAGSLRRSCRHSIDGEASIKKPMEPDFT

>SsCNGC11|Sspon.04G0008000-1A

MYASLRNFRFQNEIEVQSFRTSPLQQNLSSRKHGRAHDPRKCRLGFRGGCLEKACRNPTLKDRVLSRAFSEELESLMHAAGSSHLFFDPRGHLIHLWSKIFLSACLLSLFVDPLFLYLTGTQRNNNVCIEFKYSLALTLSMIRSLLDLFYAAHILFRFRTAFIAPSSRVFGRGELVIQPYKIARRYLGRTFWFDLVTALPLPQFVIWIVILKLNESPTTNRKSILRFSIIFQYLPRLFQIFPLTSQIIMATGVMAETAWACAAYNLILYMLASHVLGALWYLFSVQRQEACWREACLLESPTCQTMFFDCKALSSNRTIWYELSNITSLCTPGNGFYAFGIYEEALHAKLTSSSFTQKYFYCFWWGLKNLSCLGQNLSTSLSIGEITFAIVIGVLGLVLFGLLIGNMQSYLQTTMVRLEEWRTKRTDMERWMHHRQIPQPLKQCVRRYHQYQWVATRGVDEEALLQDLPMDIRRDIKRHLCLDLVRRVPLFDEMDERMLEAICERLRPALYTRGTRLVRELDPVDSMLFIIRGYLDSFTTQGGRSGFFNSCRIGAGEFCGEELLTWALDPRPSAKLPLSTRTVRAVSEVEAFALVADDLRFVASQFRRLHSARIRHRFRFYSHQWRTWAACSIQAAWRRHKRRRASVELRVREGGDVRTAGSFRRSCRHSIDGEASIKKPMEPDFTVEEED\*

>SsCNGC11-2B|Sspon.04G0008000-2B

MTFLVLMAEHNVVVSAFPRDQITEQIHVTEQRIQQDQSMFITKAMYASLRNFRFQNEIEVQSFRTSPLQQNLSSRKHGRAHDPRKCRLGFRGGCLEKACRNPTLKDRVLSRAFSEELESLMHAAGSSHLFFDPRGHLIHLWNKIFLSACLLSLFVDPLFLYLTGTQRNNHMCIEFQYSLALTLSMIRSLLDIFYAAHILFRFRTAFIAPSSRVFGRGELVIQPYKIARRYLGRTFWFDLVTALPLPQFVIWIVIPKLNESPTANRKSILRFSIIFQYLPRLFQIFPLTSQIVVATGVVAETAWACAAYNLILYMLASHVLGALWYLFSVQRQEACWREACLLESPTCQTMFFDCKALSSNRTIWYELSNITSLCTPGNGFYAFGIYEEALHAKLTSSSFTQKYFYCFWWGLKNLSCLGQNLSTSLSIGEITFAIVIGVLGLVLFGLLIGNMQSYLQTTMVRLEEWRTKRTDMERWMHHRQIPQPLKQCVRRYHQYQWVATRGVDEEALLQDLPMDIRRDIKRHLCLDLVRRVPLFDEMDERMLEAICERLRPALYTRGTRLVRELDPVDSMLFIIRGYLDSFTTQGGRSGFFNSCRIGAGEFCGEELLTWALDPRPSAKLPLSTRTVRAVSEVEAFALVADDLRFVASQFRRLHSARIRHRFRFYSHQWRTWAACSIQAAWRRHKRRRASVELRVREGGDVRTAGSLRRSCRHSIDGEASIKKPMEPDFTVEEED\*

>SsCNGC12|Sspon.04G0031130-1C

MTDQERDDVPMLLRNVELPRFPLRSTSMCIPVRDDEYEEDTFVPHTGPLFVQPPTQTAPGIPFTSRDTPDRLPRPSQGKQVSKPHAIMPEEIRGNRWSYSGQVPKNEHLMMSGPLGQCDNPDCVNCPPACRNKRHFQRGSNALDNKIHNILYGHSGGWKKKIEQIMAYIPIMNPHAKPVQQWNQFFVISCLIAIFIDPLFFFLLSVRQDGNCIVLNWNFATGLAVVRSVTDAIYFLHMLLQFRLAYVAPESRVVGAGDLVDEPKKVAIHYLCGYFFLDFFVVLPLPQVMILLVVPKVGLSAANYAKNLLRATVLLQYVPRIIRFVPLLDGQSANGFIFESAWANFVINLLMFVLAGHVVGSCWYLFGLQRVNQCLRDACSASTIPYCDSFIDCGRGMGSGLYRQQWFNDLGAEACFNTGNNATFQYGIYEQAVLLTTEDSAVKRYIYSLFWGFQQISTLAGNLVPSYFVWEVLFTMAIIGLGLRLEMQLRRRDVEKWMSHRRLPEDLRRRVRRAERFTWAATQGVNEEELLSNLPEDIQRDIRRHFFRFLNKVRLFTLMDWPILDAICDKLRQNLYISGSDILYQGGTVEKMVFIVRGKLESISADGSKAPLHDGDVCGEELLTWYLEHSSANRDGGKIKFQGMRLVAIRTVRCLTNVEAFVLRASDLEEVTSQFARFLRNPRVQGAIRYESPYWRTIAATRIQVAWRYRKRRLKRAEKSRLSEETYTSHGISTHDSFQRGQKG\*

>SsCNGC12-2D|Sspon.04G0031130-2D

MTDQERDDVPMLLRNVELPRFPLRSTSMCIPVRDDEYEEDTFVPHTGPLFVQPPTQTAPGIPFTSRDTPDRLPRPSQGKQVSKPHAIMPEEIRGNRWSYSGQVPKNEHLMMSGPLGQCDNPDCVNCPPACRNKRHFQRGSNALDNKIHNILYGHSGGWKKKIEQIMAYIPIMNPHAKPVQQWNQFFVISCLIAIFIDPLFFFLLSVRQDGNCIVLNWNFATGLAVVRSVTDAIYFLHMLLQFRLAYVAPESRVVGAGDLVDEPKKVAIHYLCGYFFLDFFVVLPLPQVMILLVVPKVGLSAANYAKNLLRATVLLQYVPRIIRFVPLLDGQSANGFIFESAWANFVINLLMFVLAGHVVGSCWYLFGLQRVNQCLRDACSASTIPYCDSFIDCGRGMGSGLYRQQWFNDLGAEACFNTGNNATFQYGIYEQAVLLTTEDSAVKRYIYSLFWGFQQISTLAGNLVPSYFVWEVLFTMAIIGLGLRLEMQLRRRDVEKWMSHRRLPEDLRRRVRRAERFTWAATQGVNEEELLSNLPEDIQRDIRRHFFRFLNKVRLFTLMDWPILDAICDKLRQNLYISGSDILYQGGTVEKMVFIVRGKLESISADGSKAPLHDGDVCGEELLTWYLEHSSANRDGGKIKFQGMRLVAIRTVRCLTNVEAFVLRASDLEEVTSQFARFLRNPRVQGAIRYESPYWRTIAATRIQVAWRYRKRRLKRAEKSRLSEETYTSHGISTHDSFQRGQKG\*

>SsCNGC13|Sspon.01G0049590-1B

MPPLAFLRRSLPARFMLASTTSSSLGGIEFLESAPMQRLLARACDGASGVWGSPGVARDEEAGGGGGGLSGRSAGGPSGECYACTQPGVPAFHSTTCDQVHSPDWDADAGSSLVPVQAQQSQPAASASAAAQHAGAAARWLFGPVLDPRSKRVQRWNRWILLGRAAALAVDPLFFYALSIGRAGQPCLYMDAGLAAAVTALRTCADVAHLAHVLLQFRLAYVSRESLVVGCGKLVWDARAIAAHYARSVKGLCFDLFVILPIPQVIFWLVIPKLIREEQVKLRIPRGQVVAAASIVSPKSGRDNLSTTFGNDLAPTSNGIEVIFSIINVLSGLMLFTLLIGNIQVFLHAVLARKRKMQLRFRDMEWWMRRRQLPSRLRQRVRKYERERWAAVTGDEEMEMIKDLPEGLRRDIKRYLCLELVKQVPLFHGMDDLILDNICDRLRPLVFSSGEKVIREGDPVQRMVFILQGKLQSTQPLTKGVVATCMLGAGNFLGDELLSWCLRRPFVDRLPASSATFECVEAAQAFCLDAPDLRFITEHFRYKFANEKLKRTARYYSSNWRTWAAVNIQLAWRRYRARTSTTDLAAMAAVPLVGGPDDGDRRLRHYAAMFMSLRPHDHLDGELGVRRGGVRASSPFPRLDLFRRGTAPLLLLPGSLEAVFFLLPLWAVVLVLVWDLGVLLSDLMDQKTKLEMMGTQAATLVVVVVSFVVSRLRRFVVAANLVQGVVAAAGVAAVVQAAVATPVDAPVVDDVVGDAADGEGEAGGARPPMMWNNNTFGFVLKRMAQILFDGSRTDKLFKHHPKDAEFLNTPIRFYTEMQTIFGSTLATGGGAWLHCSTPAFEGKTTIELGEGSKATLPVTSIAGGKRKRVAFSEDEMLMMTNMTDAVNNVANAMMKAAATHVDPALYLAIMEMPDFSIEALIVAYTHLLENKAVH

>SsCNGC13-1P|Sspon.01G0049590-1P

MPPLAFLRRSLPARFMLASTTSSSLGGIEFLEFAPMVSSLDRSQRLLARACDGGVWGSPGVARDEEAGGSGGGLSGRSAGGPSGECYACTQPGVPAFHSTTCDQVHSPDWDADAGSSLVPVQAQQSQPAASASAAAQHAGAAARWLFGPVLDPRSKRVQRWNRWILLGRAAALAVDPLFFYALSIGRAGQPCLYMDAGLAAAVTALRTCADVAHLAHVLLQFRLAYVSRESLVVGCGKLVWDARAIAAHYARSVKGLCFDLFVILPIPQVIFWLVIPKLIREEQVKLIMTILLLMFIFQFLPKVYHIIHIMRKMQKVTGYIFGSIWWGFGLNLFAYFIASHIAGGCWYVLAIQRIASCLQEECKKNNSCDLISLACSKEICFHPPWSSNVNGFACDTNMTSFSQRNVSTCLSGKGTFAYGIYLGALPVISSNSLAVKILYPIFWGLMTLSTFGNDLAPTSNGIEVIFSIINVLSGLMLFTLLIGNIQVFLHAVLARKRKMQLRFRDMEWWMRRRQLPSRLRQRVRKYERERWAAVTGDEEMEMIKDLPEGLRRDIKRYLCLELVKQVPLFHGMDDLILDNICDRLRPLVFSSGEKVIREGDPVQRMVFILQGKLQSTQPLTKGVVATCMLGAGNFLGDELLSWCLRRPFVDRLPASSATFECVEAAQAFCLDAPDLRFITEHFRYKFANEKLKRTARYYSSNWRTWAAVNIQLAWRRYRARTSTTDLAAMAAGHWLAGPTTGTGGSDTTRPCSCRSGRMTT\*

>SsCNGC14|Sspon.03G0005320-1A

MTHACGVTIFVRSQVVVWVASPAMIRAGSTTAVMTVLLVAFLLEYLPKIYHSVRVLRRMQDVSGYLFGTIWWGIALNLMAYFVAAHAVGACWYLLGAQRATKCLREQCAQAGSGCAPWALACAEPLYYGRSVNVGADRLAWAGNATARGTCLDSADNYQYGAYQWTVMLVANPSRVERILLPIFWGLMTLSTFGNLESTTEWLEIVFNIITITGGLILVTMLIGNIKVFLNATTSKKQAMHTRLRGVELWMKRKNLPRSYRHRVRQYERQRWAATRGVDECRIVRDLPEGLRRDIKYHLCLGLVRQVPLFQHMDDLVLENICDRVKSLIFPKGEVIVREGDPVKRMMFIVRGHLQSSQVLRNGAESCCMLGPGNFSGDELLSWCLRRPFLERLPASSSTLTTLESTEAFGLDAADVKYVTQHFRYTFTNDKVRRSARYYSPGWRTWAAVAVQLAWRRYKHRKTLASLSFIRPRRPLSRCSSLGEEKLRLYTALLTSPKPNQDDL

>SsCNGC15|Sspon.03G0030490-1B

MLVANPSRVERILLPIFWGLMTLSTFGNLESTTEWLEIVFNIVTITGGLILVTMLIGNIKVFLNATTSKKQAMHTRLRGVELWMKRKNLPRSYRHRVRQYERQRWAATRGVDECRIVRDLPEASAETSSTTSASASCAREGDPVKRMMFIVRGHLQSSQVLRNGAESCCMLGPGNFSGDELLSWCLRRPFLERLPASSSTLTTLESTEAFGLDAADVKYVTQHFRYTFTNDKVRRSARYYSPGWRTWAAVAVQLAWRRYKHRKTLASLSFIRPRRPLSRCSSLGEEKLRLYTALLTSPKPNQDDL

>SsCNGC16|Sspon.07G0004720-1A

MIRAGLTTPVMTVLLVSFLLEYLPKIYHAARLLRRMQGQSGYIFGTIWWGIALNLMAYFVAAHAVGACWYLLGVQRASKCLKEQCLQAAAGGCARSSAVACAAPLYYGGAPSSTGTVGSGDRLAWARNAQARGTCLSSGGDNYQYGAYSWTVMLVANPSRVERMLLPIFWGLMTLSTFGNLESTTEWVEIVFNIVTITGGLVLVTMLIGNIKVFLNATTSKKQAMHTRLRSVEWWMKRKNLPRSFRARVRQFERQRWAATRGVDECQIVRDLPEGLRRDIKYHLCLDLVRQVPFFQHMDDLVLENICDRVKSLIFPKGETIVREGDVVQRMLFIVRGHLQCSQVLRNGATSSCTLGPGNFSGDELLSWCLRRPFLERLPTSSATLVTLESTEVFGLDAADVKYVTQHFRYTFTSDKVRRSARYYSPGWRTWAAVAIQLAWRRYKHRKTLSSLSFIRPRRPLSRCSSLGEEKLRLYTAILTSPKPNQDDDF\*

>SsCNGC16-2B|Sspon.07G0004720-2B

MSSGLSARSSPSSSTASPSDDPRRKEQGRHATSGSGRRSRWRRRVQWLGGAAWALDPRARWVRDWNRAYLLACAAGLMVDPLFLYAVSLSGPLMCLFVDGWLAAAVTALRCAVDAMHVWNVATQIRIARGAGAAAQGSKPVAGGAGDEEQQQQQGAEEDDDEEAARKLPEDATPRKGMLLDFFVILPVMQVVVWVAAPAMIRAGLTTPVMTVLLVSFLLEYLPKIYHAARLLRRMQGQSGYIFGTIWWGIALNLMAYFVAAHAVGACWYLLGVQRASKCLKEQCLQAAAGGCARSSAVACAAPLYYGGAPSSTGTVGSGDRLAWARNAQARGTCLSSGGDNYQYGAYSWTVMLVANPSRVERMLLPIFWGLMTLSTFGNLESTTEWVEIVFNIVTITGGLVLVTMLIGNIKVFLNATTSKKQAMHTRLRSVEWWMKRKNLPRSFRARVRQFERQRWAATRGVDECQIVRDLPEGLRRDIKYHLCLDLVRQVPFFQHMDDLVLENICDRVKSLIFPKGETIVREGDVVQRMLFIVRGHLQCSQVLRNGATSSCTLGPGNFSGDELLSWCLRRPFLERLPTSSATLVTLESTEVFGLDAADVKYVTQHFRYTFTNDKVRRSARYYSPGWRTWAAVAIQLAWRRYKHRKTLSSLSFIRPRRPLSRCSSLGEEKLRLYTAILTSPKPNQDDDF\*

>SsCNGC16-3C|Sspon.07G0004720-3C

MSSGLSARSSPSSSTASPSDDPRRKEQGRHATSGSGRRSRWRRRVQWLGGAAWALDPRARWVRDWNRAYLLACAAGLMVDPLFLYAVSLSGPLMCLFVDGWLAAAVTALRCAVDAMHVWNVATQLRIARGAGAAAQGSKPVAGGAGDEEQQQQGAEEDDDEEAARKLPEDATPRKGMLLDFFVILPVMQVVVWVAAPAMIRAGLTTPVMTVLLVSFLLEYLPKIYHAARLLRRMQGQSGYIFGTIWWGIALNLMAYFVAAHAVGACWYLLGVQRASKCLKEQCLQAAAGGCARSSAVACAAPLYYGGSPSSAGTVGSGDRLAWARNAQARGTCLSSGGDNYQYGAYSWTVMLVANPSRVERMLLPIFWGLMTLSTFGNLESTTEWVEIVFNIVTITGGLVLVTMLIGNIKVFLNATTSKKQAMHSRLRSVEWWMKRKNLPRSFRARVRQFERQRWAATRGVDECQIVRDLPEGLRRDIKYHLCLDLVRQVPFFQHMDDLVLENICDRVKSLIFPKGETIVREGDVVQRMLFIVRGHLQCSQVLRNGATSSCTLGPGNFSGDELLSWCLRRPFLERLPTSSATLVTLESTEVFGLDAADVKYVTQHFRYTFTNDKVRRSARYYSPGWRTWAAVAIQLAWRRYKHRKTLSSLSFIRPRRPLSRCSSLGEEKLRLYTAILTSPKPNQDDDF\*

>SsCNGC16-4D|Sspon.07G0004720-4D

MSSGLSARSSPSSSTASPSDDPRRKEQGRHATSGSGRRSRWRRRVQWLGGAAWALDPRARWVRDWNRAYLLACAAGLMVDPLFLYAVSLSGPLMCLFVDGWLAAAVTALRCAVDAMHVWNVATQIRIARGAGAAAQGSKPVAGGAGDEEEQQQGAEEDDDEEAARKLPDDATPRKGMLLDFFVILPVMQNGAHRGEEEARRAYSPTPSLPQPRRRRAAKKSKPPRIDNPQQTLAPRTRNDGEQNLGLVVVWVAAPAMIRAGLTTPVMTVLLVSFLLEYLPKIYHAARLLRRMQGQSGYIFGTIWWGIALNLMAYFVAAHAVGACWYLLGVQRASKCLKEQCLQAAGGGCARSSAVACAAPLYYGGSPSSTGTVGRGDRLAWARNAQARGTCLSSGGDNYQYGAYSWTVMLVANPSRVERMLLPIFWGLMTLSTFGNLESTTEWVEIVFNIVTITGGLVLVTMLIGNIKVFLNATTSKKQAMHTRLRSVEWWMKRKNLPRSFRARVRQFERQRWAATRGVDECQIVRDLPEGLRRDIKYHLCLDLVRQVPFFQHMDDLVLENICDRVKSLIFPKGETIVREGDVVQRMLFIVRGHLQCSQVLRNGATSSCTLGPGNFSGDELLSWCLRRPFLERLPTSSATLVTLESTEVFGLDAADVKYVTQHFRYTFTNDKVRRSARYYSPGWRTWAAVAIQLAWRRYKHRKTLSSLSFIRPRRPLSRCSSLGEEKLRLYTAILTSPKPNQDDDF