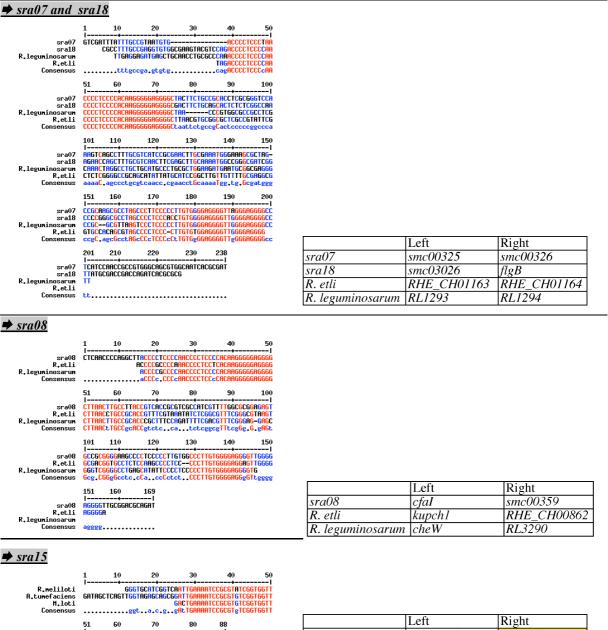
#### **Short Identity and synteny results**

#### Syntenic genes are represented in yellow



R.meliloti A.tumefaciens M.loti Consensus

	Left	Right
sra15	smc04432	tRNA-phe
A.tumefaciens	AGR_C_892	tRNA-phe
M. loti	mll6432	mll6433

#### ➡ sra21

sra21 agro Consensus	ATCGC	TCAG <mark>TCC</mark>	20 CCAAACTCGCGC SCAATATTTCGC CCAAaaTcgCGC	TCGATCTGC1	GCGTAACTTA	TACGCG
sra21 agro	1	+	70 FATACAATCACG	+	+	1
Consensus			120			
sra21 agro Consensus			CGCCGCAATGTT	-CGGAAATCC	TGACCGGCGC	GCTGCC
sra21 agro Consensus	GCGGC GCCGC	TTGTCGC	170 CGCCCTTGCCGC CGCGCTTGCCGC CGCgCTTGCCGC	CCCTGCCATO CACCGCCATO	ATCCGGTAG	GAAGGC GATGTG
sra21	201   Accga	210 CCAAGCT	220 FGAAGTCCGGAA	23832		unauge
agro Consensus	AACCT AaCca					

	Left	Right
sra21	smc00931	hisS
A.tumefaciens	AGR_C_3323	

# ➡ sra31

	1	10	20	30	40	50
sra31	TGCAT	G <mark>CC</mark> GCCCAF	AAGTGTGCAG	CGGTTTTGGG	ATAACGACAT	GCATGA
R.leguninosarun	TGCTT	GTCGCCCAF	IAAGTGTGCAG	CGGTTTTGGG	ACAACGACAT	GCATCA
M.loti	TGCAT	GTCGCCCAF	IAAGTGTGCAG	CGGTTTTGGG	AGAACGACAT	GGATCA
R.etli					GGCACGACAT	
Consensus	TGCaT	G <mark>tc</mark> GCCCAF	IAAGTGTGCAG	CGGTTTTGGG	iagaACGACAT	G <mark>CATC</mark> A
	51 	60	70	80	91 +l	
sra31	1	+			+1	
sra31 R.leguninosarun	І Т <mark>А</mark>	ACGACCTAC		CTTTATGTC	+1	
R.leguminosarum M.loti	IA TA AG-CA AAACA	ACGACCTAC Aggacctgr Aagacctgr	AGCGCGGCGC AGCGCGTCGC AGCGCGTCGC	GCTTTATGTC GCTTTAGA C	+1	
R.leguninosarun	1A TA AG-CA AAACA AA	ACGACCTAC Aggacctgf Aagagctaf Agacctcf	AGCGCGGCGC	GCTTTATGTC GCTTTAGA C C A	CTAGGCC	

## ➡ sra34

	1	10	20	30	40	50
sra34	TTCCGGT			CCCCGCGGGGC		
nezo				CCCGGC <mark>G</mark> GGCI		
etli		TCCACAAI	CAGGAAGA	CCCCGCTGGAI	AAC <mark>A</mark> GC <mark>G</mark> GGE	ittttt
leguninosarun				CCC <mark>C</mark> GCTGG <mark>A</mark> I		
Consensus		ccacaat	aatgaaaA	CCCcGCgGGal	AACaGCgGGG	iTTTTTC
	51 	60	70	80	88 I	
sra34		Gattaccae				
nezo			ictgcacta	CTATGCGAGCI	GAGT	
etli	GTTTTTG					
leguninosarun	ATTTCA	TGA				
Consensus	.tTTtgc	tag				

## → sra36

	1	10	20	30	40	50
R.meliloti A.tumefaciens	GATAG		TGCATCGGTC TAGAGCAGCG			
M.loti Consensus			ta.c.g			
	51	60	70	80	88	
	Ĩ	+			1	
R.meliloti	CRAAT	CCGCTTATG	GGCACCATTT	TCTTTTTGG	6666	
A.tumefaciens	CRAAT	CCGCCTCCG	GGCACCATT	CTTTC		
M.loti			GGCACCATCC			
Consensus	CaAATO	CGCcTctG	GGCACCAT <mark>LL</mark>	ccTttt.t.	••••	

## → sra37

sra37 R.leguminosarum R.etli Consensus	C <mark>GGT</mark> CG	CCACGCTTAT CAAGACAAAT	AAG <mark>CG</mark> GTTI CGA <mark>CG</mark> TTCI	30 GTGAATGTGA CAATTTGTGA TTGTGA tTGTGA	CGATTCAGCA CGATTCAGCA CGATTCAGCA	iaca <mark>ca</mark> t iaca <mark>ca</mark> t iaca <b>ct</b> t
	51	60	70	80	90	100
sra37 R.leguminosarum R.etli Consensus	TTCCTG TTT-TA TTT-TA	CTACGGTTTG CGACGTTTGG CGATGAATGG	CTACTATC CGTATGGT CGTATGGT	CGGACCGGGT GGCGCCAGGG GGCGATGGGG gGcgccgGGg	CGATTATGTO CGAATTTGTO CGAATTTGTO	CATTTC CATTTC CATTTC
sra37 R,leguminosarum R,etli Consensus	CCGCCA CCGCCA CCGCCA	110 CAAAATGAGA CAAAGAGGGC CAA CAAag.g.	GCAGCGAT	A At		

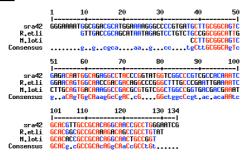
	Left	Right
sra31	smc01806	smc01807
R. etli	RHE_CH02389	RHE_CH02390
R. leguminosarum	RL0960	RL0961
M. loti	mll0880	mlr0883

	Left	Right
sra34	tufA	smc01325
R. etli	<i>tufB</i>	RHE_CH01659
R. leguminosarum	tufB2	RL1758
M. loti	mlr4028	mll4029

	Left	Right
sra15	smc04432	tRNA-phe
A.tumefaciens	AGR_C_892	tRNA-phe
M. loti	mll6432	mll6433

	Left	Right
sra37	smc02079	exoR
R. etli	RHE_C.	H01813
R. leguminosarum	RL2036	exoR

## **→** sra42



	Left	Right	
sra42	SMc01197	SMc01196	
R. etli	RHE_CH02373		
M. loti	mlr1783		

#### → sra44

sra44 R,leguninosarun Consensus	TCATI	CTCCAAT	20 CTCGCCGGATC CTCGCCGGATA CTCGCCGGATa	CAAGGTCCGG	CAGCTTGTC	<mark>iatacga</mark> GCGTTTG
	51	60	70	80	90	100
sra44 R,leguninosarun Consensus	TGCAAC GGCAAT	TATTCGC TGTC	GCACCGCTTAT ITGCCCTTTAT gcaCCccTTAT	GTAAT-GGCT GTAAGAGGCC	AAAAGGCGT AAAAGGGGAC	ITTTCA <mark>C</mark> Itttcag
	101	110	120	130	140	150
sra44 R,leguninosarun Consensus	CCCAAT	TGGCAAG	CGGAAA <mark>A</mark> TTGC CGGAAATTTGC CGGAAA <mark>a</mark> TTGC	ATTTCCGCAR	TTTCATTCA GTTTTGA	тостст
sra44 R.leguninosarun Consensus	15155    CCGCT					

	Left	Right
sra44	smc00530	nifS
R. etli	sufB	nifSCh
R. leguminosarum	sufB	nifS
A.tumefaciens	AGR_C_3348p	nifS

#### → sra67

	1	10	20	30	40	50
sra67 R,etli R,leguninosarun A,tunefaciens Consensus	GCCGG GCCGG AGCCGG	TA <mark>GCGCT</mark> TA <mark>GCGCT</mark> TAAGCGT	CTAAAACAGCC CAAAAACAGCC CAAAAACAGCC CAAAAACAGCC CATATGCAGCC CaaAaaCAGCC	GGCGTCTCAT GGCGTCTCAT GGCGTCTCAT GGTGTCCCAT	CGACCCGGCT CGACCCGGCT CGACCCGGCT CGACCCGGCT	rgacgca rg-gccg rg-gccg rgagacg
	51	60	70	80	90	100
sra67 R.etli R.leguninosarun A.tunefaciens Consensus	CCGCAR TACCAC TATCAC TATCAC	GGTTCAA GTTCAGT GTTCAGT GTTCAGT	AAGCCAGACTT CCAGAAAAAC CTAGAAAAAC CAAGAAAAAC caagaAaAC	CAAAGGGGAG AGGGGGAG AGGGGAG AGGGGAG	ATGGGGC <mark>GA</mark> ATGGGGC <mark>GCC</mark> ATGGGGC <mark>GCC</mark> ATGGGGCCCC	ATCTCC ATCTCC ATCTCC ATCTCC ACCCAA
sra67 R,etli R,leguminosarum A,tumefaciens Consensus	стессе	TTTTCGC TCTTTGT T TTTTT	120 ATGTCTGGAGG CCAAAC	AAGAACC		

	Left	Right
sra67	rpmA	smc03773
R. etli	rpmA	<i>RHE_CH04064</i>
R. leguminosarum	rpmA	rl4678
A.tumefaciens	rpmA	Atu2783