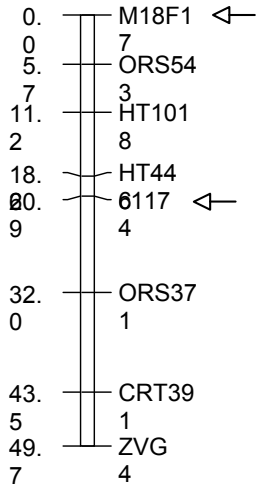
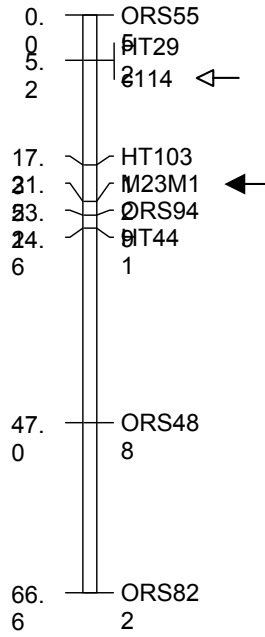


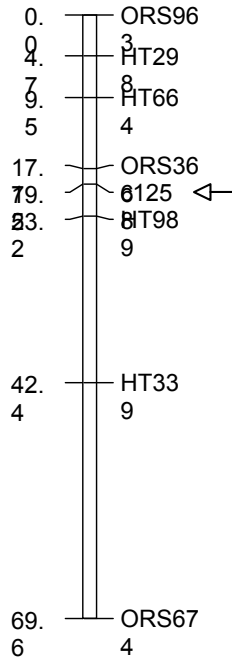
1



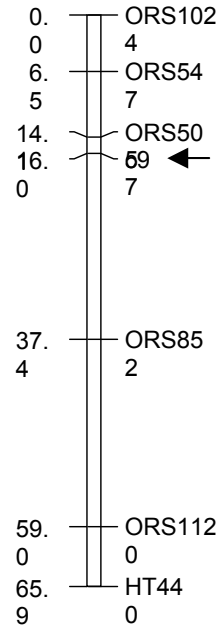
3



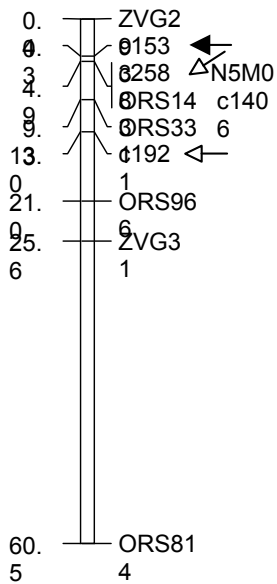
4



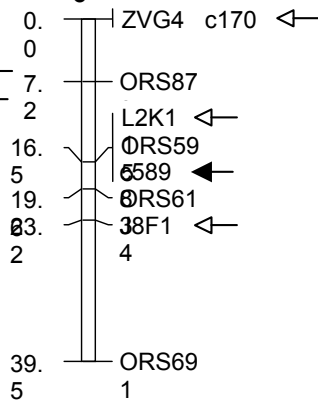
5



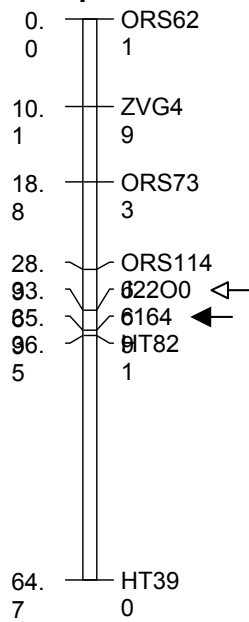
7

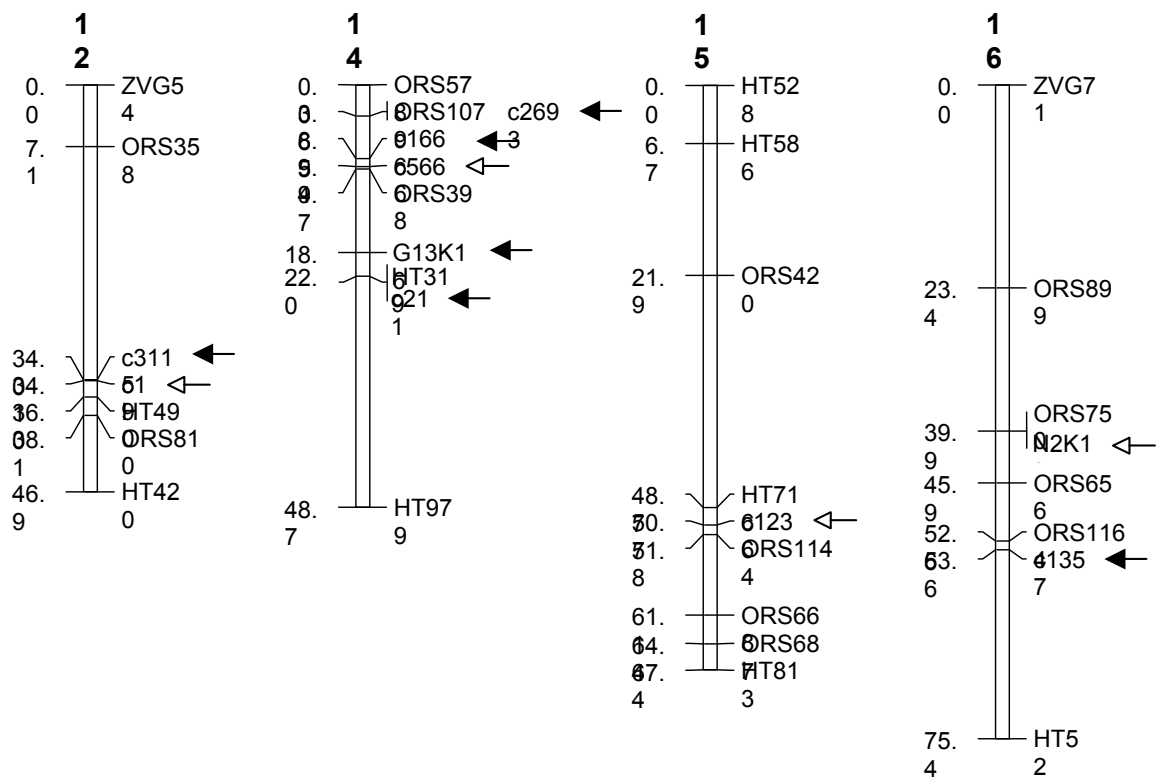


1



1





Supplemental figure 1 - Genetic map positions of 12 domestication-related loci (solid arrows) and 15 improvement-related loci (open arrows) in a wild x improved sunflower RIL population.

Supplemental Table 1 - Primer sequences

<b>Genome</b>				
<b>Walking</b>			walk primer 1	walk primer 2
c1700	5' walk		CTTGTTCAAGCGTCACAAAAAG	TAACCGTCTTCAGAGCACAATC
c2150	5' walk		AATGGTCAAAAACGCAGAGATT	CCGTGTATCAAAGCCCTAAGAG
c1236	5' walk		TCCTCAGACATTATTGTCAACAGAG	CACTCTAATTCTACCACCCTCCA
c1236	5' walk 2		GCTCGATCTGACTCGAAGTTTT	AACTGGCTCGTTTAAGTTCGAG
c1921	5' walk		GGTATAGCACAAACCCAATACG	GGGTAGAACGGCATAGGAAAG
J22006	5' walk		AAATGAAGAGTGCAAGGACCAT	AGAATAGGCCCGAGAACCACATA
J22006	3' walk		ATGGTCTTGCACCTTTCATTT	TATGGTGTCTGGGCCTATTCT
H4B03	5' walk		AAAGTGGACGTGTTGTGTTGAC	TTGTCAAAAATGAACTCGGTTG
<b>PCR-RFLP</b>		Enzyme	Fwd Primer	Rev Primer
c1666		<i>SspI</i>	as SSR	as SSR
c1357		<i>AluI</i>	AAAGAACCGTCTTCCAAATGAA	ACAATCTGCCTTCCAACATTCT
c2963		<i>DdeI</i>	as SSR	as SSR
c1700		<i>AluI</i>	GCCAGCCCAAATTACTGAATTA	CCCCAAAAACACAATCAAAAAT
c1774		<i>PstI</i>	ATTCCTGCTAAAAAGCCACCAG	ACGGAATAACATATGGCAAAGC
c1921		<i>PstI</i>	CGAGAAACCCGTTGATAAAGAA	CTTTGTCTTCGCTTTTGGATT
J22006		<i>TaqI</i>	CGATGGTTTTTCATATGGGTTTT	AAAGAATTCTCCTGCAAATGGA
<b>SSCP</b>			Fwd Primer	Rev Primer
G13K16			ACTGCCATTCCATTTGTCAGG	AATCATGAAACGCACGTAAAAA
c1236			as SSR	GGCTCTATGGTTCGACTCGTAT
<b>Sequencing</b>		Timing	Fwd Primer	Rev Primer
c1666		domestication	GGAGCCGGTTTCTGAATATG	GGTGCCTGTGTTTCTTCCTC
c4973		domestication	ACGSGTSAGGACAAGAACAA	GCCACTTTGTTCAAGTTTAGGG
c5898		domestication	TGCTTCAATGGAGTTTAATTCG	CACAAGAACATGAGGATAAAGTGC
c1236		improvement	TGGACAAAATAAGGTTTGTGG	TCCTCAGACATTATTGTCAACAGAG
c1406		improvement	ACTCAATTGGAATACCCGAATG	TCGTTTTGATCTAGGAGGTGTG
c1921		improvement	CTGACCGAGAAACCCGTTGATA	CTTTGTCTTCGCTTTTGGATT
c2016		(neutral)	GGTTGGCGGAGTTTGTAAAG	GCTCATCCCCTTTTTCTTCC
c1351		(neutral)	CCTTCATGGTACACTGCTGGT	CAAACACCACTTGCCAAAAA
c1111		(neutral)	CGCAGATGAAACACAGGAAACT	AATATAAATGGACCTCCGCTTGA
c2307		(neutral)	TGCTCTGATGTTTCGTCCAC	TCAAGCCTTACACAGTTTAGACA
c25		(neutral)	GCATATCCTTACACGGGGAAA	CAAACACTAACAGATGTTTTTGCATT
c5369		(neutral)	GAACCGTTGTCCGTCTTTGT	AAAGCAACAGAAGATAGATTTCCA
c5456		(neutral)	ATGGATGGCCAGAAGATCAC	AATATGCCCAAAGGATGCAG

Supplemental Table 2 - Individuals employed in the sequence analysis

Name	Status	Collection Locale	Plant ID
Ames 14400	Wild	Arizona	PI 649851
Ann-1114	Wild	Arkansas	PI 613727
A-1473	Wild	Kansas	PI 413027
A-1572	Wild	Mexico-Mayo	PI 413123
A-1455	Wild	Missouri	PI 413011
Ames 23238	Wild	Ohio	PI 649853
Ames 23940	Wild	South Dakota	PI 649854
Ann-646	Wild	Tennessee	PI 435552
Havasupai	Primitive		PI 369358
Hidatsa	Primitive		PI 600721
Hopi	Primitive		PI 432504
Maiz Negro	Primitive		PI 650761
Mandan	Primitive		PI 600717
Seneca	Primitive		PI 369360
RHA280	Improved		PI 552943
RHA801	Improved		PI 599768
cmsHA89	Improved		PI 650572
Mennonite	Improved		PI 650650
Pervenets	Improved		PI 483077
VNIIMK 1646	Improved		PI 650385
<i>H. petiolaris</i>	Outgroup	Texas	PI 435829