\mathbf{A}		Gm15:6,137,43961374196,137,410
	Consensus	AGAAGGTGAGCTCCGGCCAC \mathbf{A} GCTGCTGGA
	CD-5	
	Wm82	
	Archer	
	Minsoy	
	Noir1	
	Forrest	
	Hendricks	
	Missoy	
	Parker	
	Bert	
	Anderson	
	Dunfield	
	Lincoln	
	Odgen	
	Perry	
	Richland	
		C A G Glutamine
		C G G Arginine
В		
G.	lyma13g30560	AGAAGG G GAGCTCC G GCC G CAGCTGCT A GA
G.	lyma15g08680	AGAAGG T GAGCTCC G GCC A C A GCTGCT G GA
S	NP differences	*
G.	lyma13g30560 <i>y11</i>	G
G.	lyma13g30560 <i>y11</i>	–2AA
G.	lyma15g08680 CD-	5A.GG

Figure S4 The CD-5 mutation in the candidate gene Glyma15g08680 appears to be a novel *de novo* mutation. (A) Sequence results of CD-5 compared to a panel of diverse soybean lines. Of the 29 diverse soybean lines sequenced (15 are shown), only CD-5 was found to have Guanine rather than Adenine at position 6137419. The CD-5 SNP causes a nonsynonymous change from Glutamine to Arginine. (B) Sequences from Glyma13g30560 and Glyma15g08680 showing that the *y11* and CD-5 SNPs in the separate genes occur at the same relative SNP position, but that sequences from the two genes can be differentiated by nearby SNPs. Sequences for Glyma13g30560 and Glyma15g08680 are from positions Gm13:33,146,509...33,146,538 and Gm15:6,137,439..6,137,410, respectively.