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.