







Estimating Soybean Injury and Predicting Yield Loss

Rating (%)	Description	Pictures
0	No injury, plant growth is normal	 A photograph showing a dense field of healthy soybean plants. The leaves are vibrant green, fully developed, and show no signs of stress or damage.
10	Slight reduction in height or canopy volume, cupped or bubbled leaves on \leq upper 10% of the plant, bent petioles, and chlorosis or necrosis	 A photograph showing soybean plants exhibiting signs of injury. The leaves are distorted, appearing cupped or bubbled, and some show signs of chlorosis or necrosis. The plants appear slightly stunted compared to the healthy ones in the previous image.

20	<p>Moderately crinkled leaflets (extended across \leq upper 20% of the plant), curled petioles, reduced height and canopy volume, cupped terminal leaflets.</p>	
30	<p>Moderate to high reduction of height and canopy, compacted internodes and plants begin to have an abnormal appearance, malformation with drawstring, fiddleneck, or cupped effects on \leq upper 30% of the plant, many petioles curled and main stems may be bent.</p>	

40	<p>Highly stunted plants ($\leq 40\%$ of the plant), petioles curled and main stems bent and/or starting to curl upper leaves exhibit severe malformation and expansion of new leaves suppressed, plant may have patches of necrotic tissue.</p>	
50	<p>Very high reduction of plant height ($\leq 50\%$ of the plant) with little likelihood of recovery from the apical meristem, new growth suppressed, formation of pods reduced or malformed, some leaf and stem tissue becomes necrotic, petioles, and stems show severe twisting.</p>	

60

Severe height and canopy reduction, including any new growth from axillary buds, leaves severely cupped or fiddlenecked on $\leq 60\%$ of the plant, petioles and stems twisted, swollen, and splitting, more extensive die back of tissue.









70

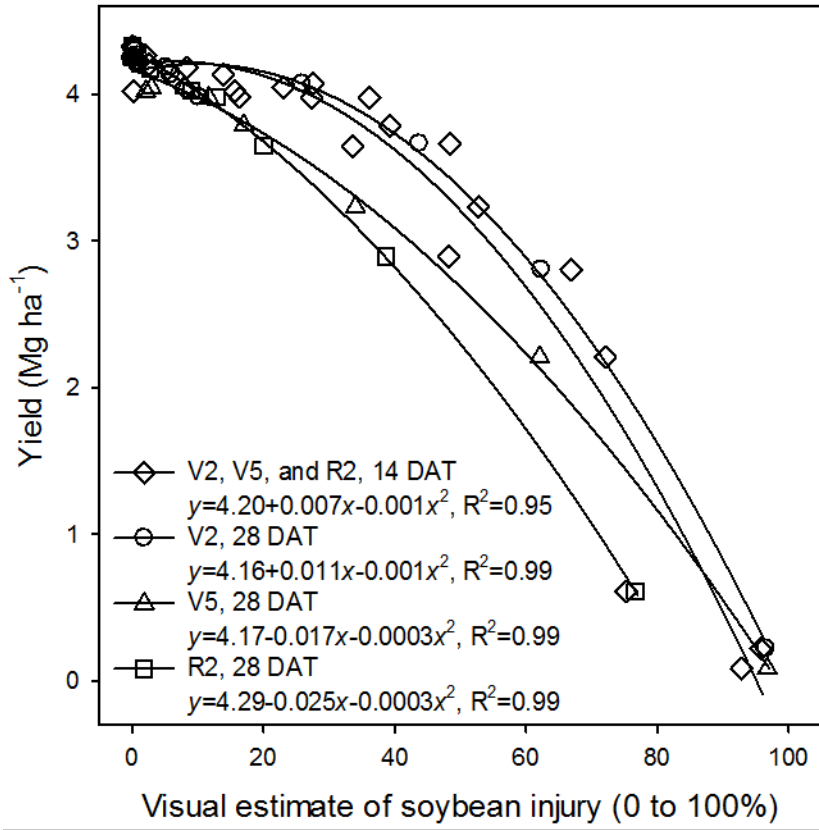
Severe to very severe reduction of plants, new growth callused and inhibited, most leaves severely deformed and mostly necrotic, extensive petiole bending.



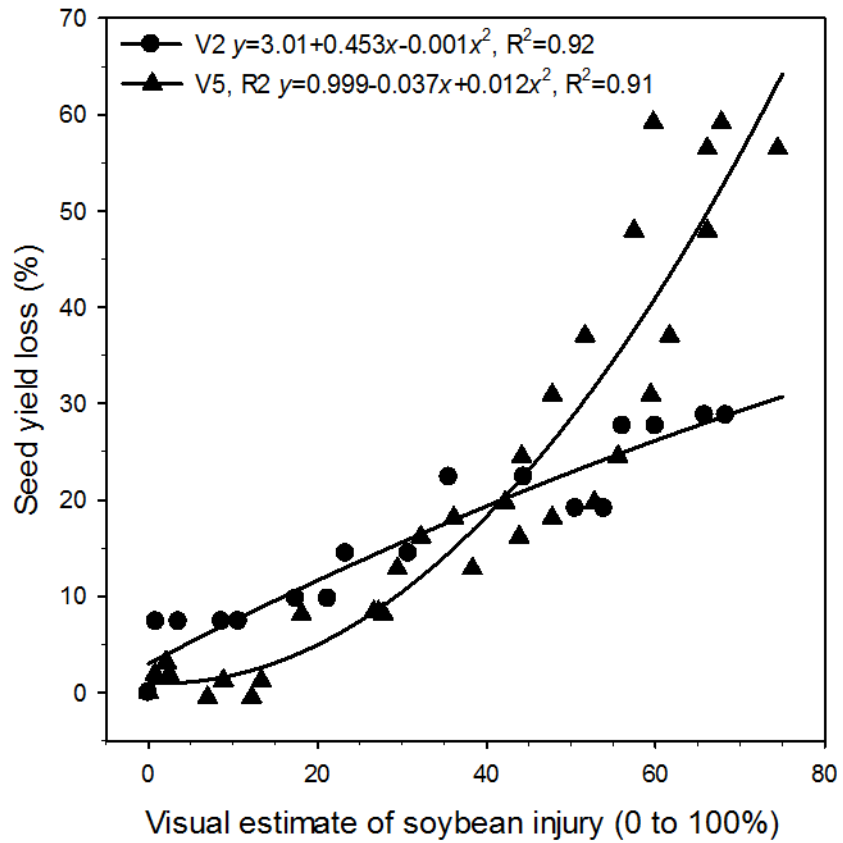
		
80	<p>Very severe soybean injury, $\leq 80\%$ of the plants mainly prostrate, petioles twisted with leaves drooping, leaves are chlorotic or necrotic, stems severely twisted, swollen, and split.</p>	

90	Plant dying, \leq 90% of the plants mainly prostrate, leaves and stems mostly chlorotic or necrotic, all petioles severely twisted, swollen, or split.	
100	All plants dead.	

Soybean Yield Loss from 2,4-D



Soybean Yield Loss from Dicamba



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