



**Use Legumes As a Nitrogen Source**  
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With high fertilizer costs, now is a good time to say again what many farmers have long known. Legumes can be considered as a nitrogen fertilizer source. Alfalfa, clover and soybeans provide nitrogen through nodulating bacteria. By taking the available nitrogen credit, you can significantly reduce your cost of production.

Research shows that a significant alfalfa stand (70-100% alfalfa, 4 plants per sq. ft.) can provide between 100 and 190 lbs of available nitrogen in the first year for the crop following alfalfa. This amount of nitrogen should meet the total nitrogen need for most crops. Lesser stands of alfalfa will still provide significant amounts of total nitrogen. A fair stand of alfalfa (30-70% alfalfa, 1.5 to 4 plants per sq. ft.) can provide 70 to 160 lbs. of N per acre. A poor stand of alfalfa (<30% alfalfa, 1.5 plants per sq. ft.) will still provide 40 to 130 lbs. of N per acre.

ALFALFA	MEDIUM & FINE TEXTURED SOILS		SANDY SOILS	
	> 8 inches of regrowth	< 8 inches of regrowth	> 8 inches of regrowth	< 8 inches of regrowth
<b>Stand Density</b>	NITROGEN CREDIT, LB / ACRE			
<b>Good</b> (70-100 % alfalfa, > 4 plants/ft <sup>2</sup> )	190	150	140	100
<b>Fair</b> (30-70 % alfalfa, 1.5- 4 plants/ft <sup>2</sup> )	160	120	110	70
<b>Poor</b> (0-30 % alfalfa, < 1.5 plants/ft <sup>2</sup> )	130	90	80	40

Second year credit: In the second cropping year following fair and good stands on medium and fine textured soil, you can take a 50 lb N/acre credit.

**SOYBEAN**  
**40 lbs N /acre** is available to crops following soybean in a rotation. No credit on sandy soils.

Clover can also provide nitrogen credits. Red clover and birdsfoot trefoil stands provide 80% of the nitrogen credit of alfalfa. On sand soils, you should not take any nitrogen credit for clover or birdsfoot trefoil. Soybeans can also provide nitrogen. You will recover one pound of nitrogen for every bushel produced in the prior year with a maximum credit of 40 lbs. per acre. Again, there are no credits on crops grown on sandy soils. Peas, snap beans and lima beans are legume crops that provide up to 20 lbs. of nitrogen credits, and no credit should be taken on sandy soils.

For more information and more detailed charts on legume credits, *Credit Legume Nitrogen and Reap the Profits* (UWEX Pub. number A3591) and *Using Legumes as a Nitrogen Source* (Pub.A3517) can be downloaded at the Nutrient and Pest Management (NPM) program's website ([ipcm.wisc.edu](http://ipcm.wisc.edu)). To order a paper copy or other NPM publications, contact the NPM program by phone at (608) 265-2660 or by email ([npm@hort.wisc.edu](mailto:npm@hort.wisc.edu)).