

ASK THE EXPERTS!

Members are encouraged to write to our editors here at the Forage Focus! We will regularly feature questions provided by our readers - please understand that not all questions will be published; however, your questions will be answered by one of our professionals. Please submit by mail or email. Thank you! Your Forage Focus Editors

If my alfalfa stand looks thin this spring, can I thicken it or re-seed it with alfalfa? *JD, South Dakota*

Dear JD,

Generally NO, but in some cases yes.

“YES” applies ONLY as follows: if the alfalfa field was seeded in 2003 (spring or late summer), and the stand appears thin this spring (< 40 stems/ft²), it is generally safe to either no-till seed alfalfa or work it up and re-seed alfalfa this spring. The latter approach is usually preferred, so you can get a “fresh start” on controlling competition from weeds and existing alfalfa. Autotoxicity generally doesn’t become an issue until a healthy alfalfa stand is a full year old.

“NO” generally applies when considering re-seeding any alfalfa field that was previously seeded in August 2002 or earlier. These older stands usually present greater risk for autotoxicity damage to a new alfalfa seeding. Only in the most acute cases does autotoxicity result in failure of alfalfa seedlings to emerge. The more common, subtle form of alfalfa autotoxicity is altered root structure and stunted yields (despite good stands) for the life of the stand. Where older stands look thin this spring, the safest approach is to rotate out of alfalfa until spring 2005, and take advantage of residual nitrogen left by the old alfalfa stand with a full-season grass crop like corn silage. On sandy soils where other autotoxicity risk factors are low (see risk assessment table), alfalfa could be reseeded in August 2004 provided adequate moisture (eg. irrigation) is available. In the latter case, short-season annual forages like small grains, small grain-pea, or foxtail millet are good options, depending upon forage quality needs.

The table is a tool you can use to estimate your risk of autotoxicity when considering an alfalfa seeding. Also, please refer back to Dwain Meyer’s article “Allelopathy in Alfalfa” for more detailed information on autotoxicity.

Sincerely, *Forage Focus* Editors -
Paul Peterson, Craig Scheaffer, Dan Undersander

Alfalfa Autotoxicity Risk Assessment -

Factor	Possible Score	Your Score
1. Amount of previous alfalfa Fall cut or grazed < 1 ton/acre > 1 ton/acre	1 3 5	
2. Disease resistance of variety to be seeded High Moderate Low	1 2 3	
3. Irrigation or rainfall potential prior to re-seeding High (> 2 inches) Moderate (1-2 inches) Low (< 1 inch)	1 2 3	
4. Soil type Sandy Loamy Clayey	1 2 3	
5. Tillage Moldboard Plow Chisel Plow No-till	1 2 3	
Sum total of responses 1 thru 5		
6. Age of previous alfalfa stand < 1 year 1-2 years > 2 years	0 0.5 1	
7. Re-seeding delay after alfalfa kill/plowdown 12 months + 6 months 2-4 weeks < 2 weeks	0 1 2 3	
Your total score = Sum of responses 1-5 x Sum of Responses 6&7		

If your score is:	Your risk is:	Recommendation:
0	LOW	Seed
4 to 8	MODERATE	Caution, potential yield loss
9 to 12	HIGH	Warning, yield loss is likely
>12	VERY HIGH	Avoid, stand and yield losses are likely