

Establishing Alfalfa

Establishing alfalfa requires more effort and is more crucial compared to other crops because it lives longer. Since an alfalfa plant will last four years or more, a poor producing stand can be haunting. Stunting during the establishment phase can carry over to subsequent years. However, special care to properly seed alfalfa and a good stand will pay dividends over the life of the crop.

Factors to Consider:

A combination of management strategies work together towards success:

- Plant a variety with good disease resistance and winter survival score
- To avoid autotoxicity, don't plant alfalfa after or into an existing alfalfa field
- Firm the seedbed before and after planting by rolling the field
 - Good seed to soil contact is key
- Ensure seed is placed shallow (1/4 to 1/2 inch or less)
 - If no seed ends up on top of the ground, it was seeded too deep
- Calibrate planter to know how much seed is dropping
- Direct seeding (no companion or nurse crop) is more likely to produce a successful stand
 - If using a nurse crop like oats, seed the oats light and harvest early
- Fifteen seedlings per square foot is minimum for successful stand



Action Plan:

1. Plan and select a well-drained field for alfalfa. Take a soil test a year before planting. This provides time to add appropriate fertilizers and lime for those areas that call for it.
2. There are many ways to plant alfalfa, but key success factors include good seed to soil contact and not placing the seed too deep. Having a firm seedbed helps and this also makes it nicer for harvesting throughout the life of the stand.
3. Alfalfa grows better without competition so anything to reduce or eliminate stress will increase yield and persistence. This includes controlling weeds (Roundup Ready® alfalfa is ideal here), eliminating nurse crops, controlling pests like potato leafhopper when present, and reducing disease impact by planting good genetics and treated seed. Stunting from stress or competition will impact current yield and potentially even the yield in the year following the severe stress.
4. Generally, looking at a stand will indicate if it is thick enough. When in doubt, a minimum of fifteen seedlings per square foot distributed throughout the field is the replant threshold. Alfalfa will bush out and fill in when seemingly thin and will thin out after the first season when it is too thick.



Summary:

Well-managed alfalfa can be very productive and offer high value returns. Selecting a premium alfalfa with better genetics has great benefits in the long term. A Roundup Ready® variety makes weed control easier while leading to improved yields with higher quality potential in the first and following cuttings. Pay attention to details in establishing the alfalfa and find the benefit in good forage.

Resources

A number of resources from the University of Wisconsin-Madison can be used to gain more insight into establishing alfalfa.

[How to Get a Good Stand of Alfalfa or Grass](#)

[Effect of Seedling Year Stress on Future Alfalfa Yields](#)

[Getting a Good Forage Stand](#)

[Determining the Optimum Alfalfa Seeding Rate](#)

[Seeding into an Existing Alfalfa Stand](#)

[Seeding Alfalfa Fields Back Into Alfalfa](#)

[Seeding Rate of Different Alfalfa Seed Lots](#)

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