

# Ward Off Early Alfalfa Seedling Diseases with Fungicide Treatments

**Randy Welch, Croplan by WinField**

Once an alfalfa seed germinates, it must survive, emerge, and establish before it can grow into a healthy, persistent, and harvestable alfalfa plant. Unfortunately, a significant percentage of seedlings can die under typical field conditions — that is where the use of seed treatments can mean the difference between success and failure.

Although genetic resistance usually increases as alfalfa develops, seedlings can benefit from seed treatments that protect against early seedling diseases like *Aphanomyces euteiches* (common root rot), *Rhizoctonia solani* (seed rot and damping off), *Fusarium spp.* (wilt, damping off, crown and root rot) and *Phytophthora medicaginis* (root rot). In addition to seed treatments like Apron XL® fungicide (active ingredient mefenoxam or metalaxyl-M), producers can now supplement early plant health with Stamina® fungicide seed treatment.

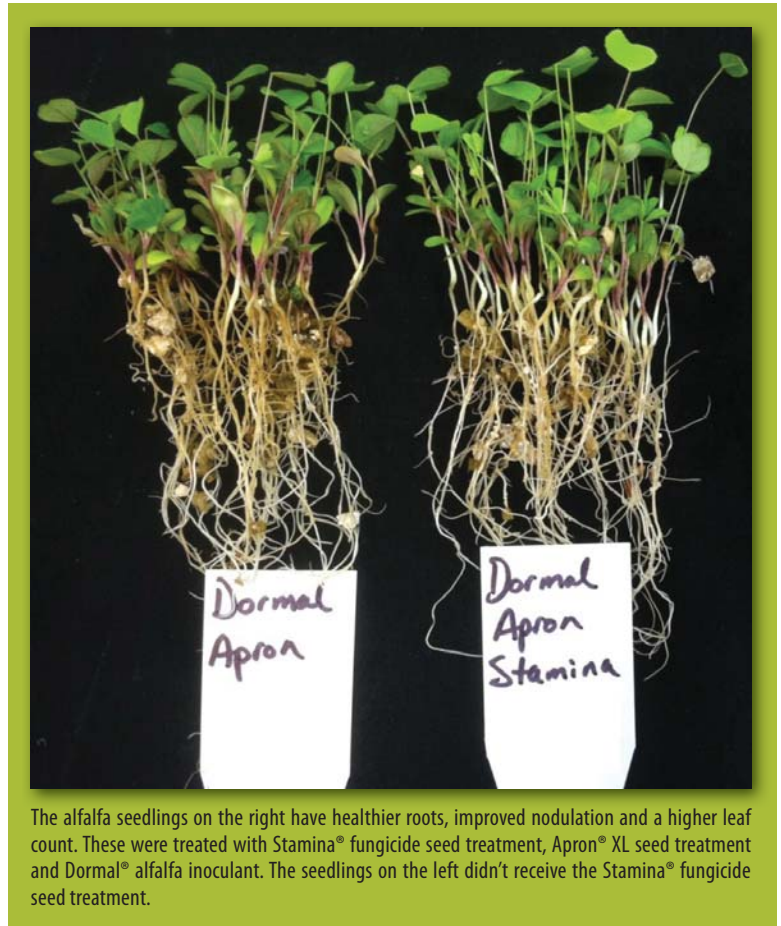
“*Aphanomyces* and *Phytophthora* are two of the most damaging seedling diseases under wetter soil conditions. These diseases can significantly reduce alfalfa stand establishment,” explains WinField Alfalfa and Forage Agronomist Randy Welch. “Stamina® is the first fungicide shown to have protection against *Aphanomyces* race 1 and race 2. The improved protection it provides can result in higher germination rates, healthier roots, and larger plants.”

Stamina® fungicide seed treatment is powered by F500® fungicide, the same active ingredient as Headline® fungicide. Using Stamina® and Apron® XL in combination as a seed treatment provides maximum protection against seedling diseases. While Apron® XL provides good protection against *Phytophthora* root rot, it does not protect against *Aphanomyces*. In the upper Midwest, *Aphanomyces* is one of the fastest spreading diseases and it is often misdiagnosed as herbicide damage. *Aphanomyces* typically occurs in saturated soils and is frequently aggravated by soil compaction. In addition to weakening, stunting or outright killing of seedlings, the *Aphanomyces* organism can lead to a lack of root development and reduced nodulation.

“Replicated alfalfa yield trials conducted in the Midwest during the 2011 growing season confirm Stamina® fungicide seed treatment may also improve stand establishment and boost yields in the first seeding year<sup>1</sup>,” Welch adds. “Stamina® has also been shown to increase cold tolerance and survival in alfalfa seedlings.”

In preliminary assays, CROPLAN® LegenDairy brand alfalfa seedlings were exposed to -10°C (14°F) for 90 minutes. The survival rate of seedlings treated with Stamina® fungicide seed treatment were significantly higher than the survival rate of the untreated check.

In 2014, three CROPLAN® Genuity® Roundup Ready® alfalfa varieties can be ordered with Stamina® fungicide seed treatment as part of GroZone® plus Advanced Coating® Zn 34% (CVS): CROPLAN® RR Apathron, RR Stratica, and RR Vamoose alfalfa. The conventional CROPLAN® Rebound 6.0 and LegenDairy XHD alfalfa varieties can also be ordered with Stamina® seed treatment.



The alfalfa seedlings on the right have healthier roots, improved nodulation and a higher leaf count. These were treated with Stamina® fungicide seed treatment, Apron® XL seed treatment and Dormal® alfalfa inoculant. The seedlings on the left didn't receive the Stamina® fungicide seed treatment.

<sup>1</sup>Because of factors outside of WinField's control, such as weather, applicator factors, etc., results to be obtained, including but not limited to yields, financial performance, or profits, cannot be predicted or guaranteed by WinField. Results not typical and actual results may vary.

For more information about ordering CROPLAN® brand alfalfa with Stamina® fungicide seed treatment, contact your local WinField retailer.