Hi-Salt Salinitiy Tolerant Alalfa

Combining history and science

The largest alfalfa testing program in the world—covering almost 80,000 research plot trials annually—led to the development of Hi-Salt salinity tolerant alfalfa. Hi-Salt varieties provide improved germination rates and yield potential when planted in high-saline soils.

Hi-Salt tolerant varieties:

- Reduce yield loss when planted in fields with a salinity greater than 2.0 on the electrical conductivity (EC) scale.
- Can be planted to help remediate dryland and irrigated soils that have developed excessive salinity and reduce the effect of salinity by 2.0 to 3.0 EC points.
- Provide resistance to a range of diseases, pests and other stressors in addition to salinity.
- Can be planted in non-saline soils.

Implications

Soils that have reached a salinity of 4.0 EC or higher can see seedling mortality increase by 35% and a yield drop of 15%.[1] With many alfalfa varieties, every EC point above the variety's salinity threshold decreases yield by 7.5%.[2] However, Alforex Seed's Hi-Salt salinity tolerant alfalfa varieties were developed to withstand several stressors, including high salinity soils, without demonstrating the same types of yield loss others experience. This advancement helps farmers increase yield potential in high-saline soils.

Options for licensees and value add

Alforex Seeds offers several ways to license or sell Hi-Salt salinity tolerant alfalfa. Seed can be private labeled (cleaned, conditioned, bagged) or sold using the Alforex® Seeds brand. Along with the seed, Alforex can provide marketing support, including help with tech sheets and sell sheets—even for those who private label. Sales rep training on alfalfa agronomics, cutting practices and positioning is also available.

For more information about licensing or distributing Alforex alfalfa varieties, contact your Alforex Seeds account manager or your Corteva Agriscience account manager.

[1] Benes, Sharon, Daniel Putnam, Inderjot Chahal, Stephen Grattan and John Bushoven. "What Is the Ability of Alfalfa to Sustain Saline Conditions?" Proceedings of the 2014 California Alfalfa, Forage, and Grain Symposium at Long Beach, CA, December 10-12, 2014. http://alfalfa.ucdavis.edu.

[2] Mass, E.V. "Salt Tolerance of Plants," *CRC Handbook of Plant Science in Agriculture*, edited by B.R. Christie. New York, NY: CRC Press, 2019.