Cl-utch™

3-0-7.5

Below Ground Photosynthesis Enhancement

HEIGHTENED DISEASE SUPPRESSION & WATER USE EFFICIENCY

Shift into higher yields

- Cl-utch™ is a premium nutrition trifecta formulated for the Pacific Northwest to aid in photosynthesis enhancement and disease suppression.
- Formulated with a proprietary corrosion inhibitor, Cl-utch is an immediately available form of chloride for optimal plant health.
- Cl-utch provides a unique and tank-mix friendly blend of chloride, potassium, and nitrogen designed as the below ground partner to foliar Rally™ applications.
- Optimized for PNW crops, Cl-utch delivers a higher volume of chloride with improved cold tolerance as compared to KCl.

Physiological Leaf Spot *(Cl deficiency)*

- Older leaves may die prematurely
- Up to 60% of the flag leaf can turn brown and die
- Spots enlarge into brown, necrotic areas; oval or irregularly shaped
- Tiny brown spot or fleck on lower leaves(a yellowish halo may surround the spot)

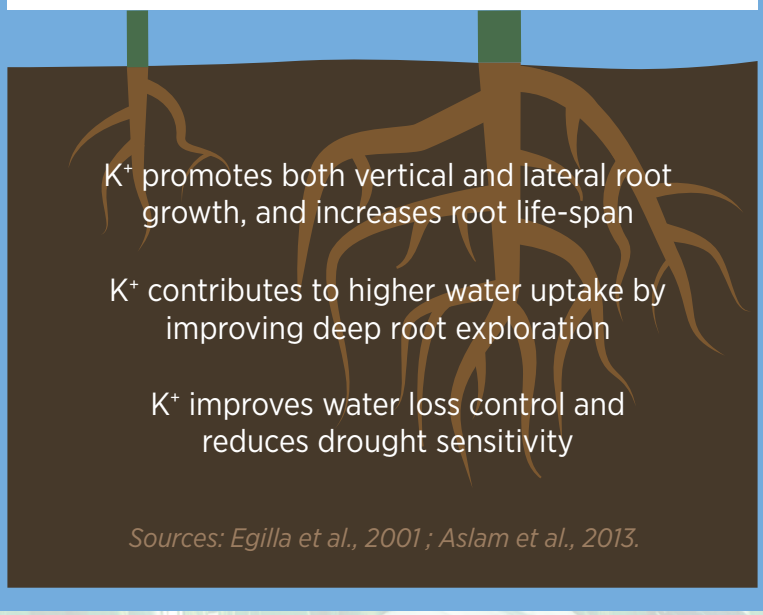
10+ bu/ac yield gain by adding Cl to deficient PNW soils

Consistently demonstrated in trials with both symptomatic and asymptomatic crops; The McGregor Company and Washington State University.

UP TO 20% YIELD LOSS due to PLS in wheat[+]

[+]Oregon State University, PNW Pest Management Handbook, 2023

Deficient potassium reduces crop standability and water use efficiency.



K^+ promotes both vertical and lateral root growth, and increases root life-span

K^+ contributes to higher water uptake by improving deep root exploration

K^+ improves water loss control and reduces drought sensitivity

Sources: Egilla et al., 2001 ; Aslam et al., 2013.

START. FEED. FINISH.

YIELD 3D™

Your pathway to optimal farm profitability

FREQUENTLY ASKED QUESTIONS

What causes physiological leaf spot?

In the Pacific Northwest, physiological leaf spot is particularly prevalent due to chloride deficient soils. Research has shown that physiologic leaf spot does not respond to applications of fungicides. Moreover, symptoms are reduced and grain yield is improved by applying chloride fertilizer to the soil before planting and before flag leaf emergence.

Why is chloride important in wheat crops?

Chloride is an essential nutrient for photosynthesis. Proper chloride fertilization helps deter plant disease; aids in the transport of nutrients such as potassium, calcium, and magnesium; and also helps move and retain water in the plant cells.

What makes the nutritional trifecta in Cl⁻utch beneficial to PNW crops?

Chloride deficiency is particularly prevalent in Pacific Northwest soils resulting in widespread Physiological Leaf Spot disease. The unique combination of chloride, potassium, and nitrogen in Cl⁻utch provides ideal chloride levels with a boost of potassium and nitrogen to give the plant a robust nutritional package.

Notes

GUARANTEED ANALYSIS	
Total Nitrogen (N)	3%
Ammoniacal	3%
Soluble Potash (K_2O)	7.5%
Chlorine (Cl)	13.8%

Derived from: Ammonium Chloride, Muriate of Potash