

APPLICATION GUIDE OF HYFER PLUS FOLIAR FERTILIZER

IN WINTER WHEAT

Introduction:

Wheat (*Triticum* spp.) is a cereal grain which is grown on more land area than any other commercial crop and is the most important staple food for humans. Wheat is a member of the grass family that produces a dry, one-seeded fruit commonly called a kernel. It grows between 2 and 4 feet (0.6 to 1.2 meters) tall. Wheat is one of the first cereals known to have been domesticated along with corn and rice, and wheat's ability to self-pollinate greatly facilitated the selection of many distinct domesticated varieties. Much of the wheat used for livestock and poultry feed is a by-product of the flour milling industry. Wheat straw is used for livestock bedding. The green forage may be grazed by livestock or used as hay or silage.

Wheat is normally planted in 15-30 cm rows. Row spacing out to about 36 cm have little effect on yield in most seasons, although some yield reduction may be expected in very good seasons in wide rows. With zero tillage and moisture-seeking machinery there has been a trend to plant in rows as wide as 45 or 50 cm. Wheat is most productive when planted on soils that have good surface and internal drainage, a fertility level of at least medium and a neutral or slightly acidic soil. Fields that have poor surface or internal drainage or that are subject to prolonged overflow should not be planted with wheat. Test soils to determine fertilizer and lime needs well before planting time. Planting with a grain drill is the preferred method because it allows uniform depth of planting and results in a more uniform stand. Broadcast seeding followed by light disking or harrowing to cover the seed can be used where drilling is not convenient. A seeding rate of 60-90 pounds per acre of high quality seed planted into a good seedbed with adequate moisture is satisfactory. Adjust the seeding rate up to about 90 pounds per acre for broadcast planting, late planting, or planting into a poorly prepared seedbed or one with inadequate moisture. For proper emergence and a vigorous stand, plant seed at a depth of 1 to 2 inches. Coverage should be less in medium to heavy textured soils than in light or sandy soils. Coverage should also be reduced for late planting and for planting into soils with abundant moisture for emergence.

Proper Fertilizer application and timing is very important, as this may impact directly to the optimum yield potential and quality of the crop. Complete soil analysis is the best way to determine the total fertilizer requirement to be applied, FEEKES SCALE is use to determine when to apply fertilizer. The usual practice of Macro nutrient (N,P,K,S) supplementation is via soil application. Although micronutrients are required in lesser amount than macronutrients, deficiency of any of this element has a very large impact on the quality and potential yield of the plant. Foliar fertilizer application of nutrient can be use to supplement the immediate requirement of the plant. Hyfer Plus Foliar Fertilizer, is a unique blend of properly balanced essential macro and micro nutrients, vitamins, hormones, amino acid, humic acid, and surfactant, formulated to supplement necessary nutrients for optimum plant development .

Advantages of HYFER FOLIAR FERTILIZER:

1. HYFER foliar fertilizer has a well balanced combination of Macro and Micro Nutrients (Nitrogen, Phosphorus, Potassium and Calcium Boron, Copper, Iron, Manganese, Magnesium, Molybdenum, Sodium, Sulfur and Zinc), Humic Acid, Amino acids, vitamins, Hormones and Spreader sticker.

2. Nutrient contents of HYFER foliar fertilizer is readily absorbed by the leaves and immediately translocated into the site of photosynthetic activity, thus making it faster for the plant to manufacture its “own food”.

3. With its neutral pH(6.8-7.0),HYFER foliar fertilizer is compatible to be applied in combination with commonly used agricultural pesticides.

4. Hyfer foliar fertilizer can also be used for drip fertilizer application. Unlike other commercially prepared chemical granular fertilizers, Hyfer foliar fertilizer does not cause acidity to the soil. With its neutral pH, it can correct soil acidity/alkalinity throughout time when used regularly.

5. Economical and convenient, HYFER foliar fertilizer can reduce fertilization cost by up to 30%-50% ,reduce labor cost and maintenance cost in dripping systems, because it does not clog the nozzles which means regular cleaning of the drip hose can be done at a longer interval.

HYFER plus foliar fertilizer is formulated based on the plant growth stages, Growth enhancer 22-11-9 (Green) recommended during early plant development, and Bloom booster 8-16-24 (Orange), recommended during , flowering, fruiting and maturation stages.

DOSAGE AND APPLICATION

Before opening, shake the plastic container very well to homogenized the sedimented particles

As foliar spray:

Dilute HYFER foliar fertilizer at a rate of 1 liter in every 200 liters of clean water and mix thoroughly. Using power sprayer, apply the mixed solution of HYFER PLUS growth enhancer uniformly as a spray onto the leaves and young stems of the plant starting on FEEKES 4, repeat application every 3-4 weeks for maintenance. Shift to HYFER PLUS bloom booster during FEEKES 9 onwards. Best time of application is early in the morning or late in the afternoon. Spray volume per hectare is 200 liters. Shorter application interval, every 10-15 days is recommended on plants showing nutrient deficiency symptoms ,maintain short spray intervals until Nutrient deficiency symptoms is corrected.

As drip irrigation:

Dilute HYFER foliar fertilizer at a rate of 500ml in every 200 liters of water and mix thoroughly. Using drip irrigation system, apply the mixed solution directly into the soil 2-3 inches away from the plant. Repeat application every 3-5 days until nutrient deficiency symptoms is corrected.

Notice that soil fertility and pH must be assessed from time to time using soil analysis. Proper timing and application of fertilizers is important. Soil pH must be monitored before application of fertilizer. For economic reasons, 50% of recommended rate of chemical fertilizer + Full recommended rate of HYFER foliar fertilizer is the best combination. However, increasing soil fertility by using organic fertilizer or animal manure + Full Recommended rate of HYFER can also be an alternative. Recommended Macronutrient (N,P,K,S) supplementation base on soil analysis in the area via soil application can be done using chemical granular(Urea,DAP,MOP) fertilizer during different stages of the plant.