

Foliar Support System

An effective foliar support program will consider the current nutritional status of your crop, available moisture, physical and chemical properties of your soil and yield targets.

By using SAP tests growers can:

- ✓ Identify yield limiting nutrient deficiencies.
- ✓ See the impact of the nutritional program to date and,
- ✓ Adjust their nutritional program within the constraints of the season.

The use of foliar applied nutrients can provide rapid growth responses. Healthier more productive plants deposit more plant exudates into the soil which benefit the soil microbial population. A more active root system enables crops to more fully utilise the nutrient and moisture resources available.

To maximise the returns from foliar nutrient products avoid application during periods of plant stress.

ZincPac

ZincPac provides soluble Zinc in an easily absorbed plant available form, ideal for early root development. The ZincPac formulation includes amino acids as a protein form of Nitrogen to stimulate plant growth, Carbon and metabolites to give energy, and microbial enzymes to boost plant utilisation and efficiency.

Applications of ZincPac are most appropriate in the following situations:

- In soils which are inherently low in Zinc.
- In many alkaline black soils where the higher pH can reduce Zinc availability.
- Where the starter program did not include Zinc.
- In seasons where there is a cold start and Zinc was not applied up front.

In these situations ZincPac at 1.5-2L/ha applied by 4 leaf (GS14) to early tillering (GS22) is likely to be beneficial leading to enhanced root development and improved crop vigour.

Stimul8

Stimul8 is a broad spectrum foliar incorporating eight essential components Nitrogen, Phosphorus, Potassium, Calcium, soluble Carbon, amino acids, kelp and microbial enzymes to stimulate vegetative growth during tillering and booting.

Early applications of Stimul8 at 2-4L/ha are suitable for tillering crops while higher rates of 8-10L/ha are recommended for crops during booting.

Stimul8 applications would be appropriate when:

- Minimal pre-plant nutrition was applied or
- When SAP or leaf tests indicate nitrate, Phosphorus or Calcium levels are low.

Where there is a significant Nitrogen requirement, Stimul8 may be applied in conjunction with other Nitrogen sources.

CalPac

The new formulation of CalPac incorporates Boron to enhance translocation of Calcium to new tissue. Calcium is a growth nutrient essential for cell division and new leaf production; it enhances root development and builds plant strength. Strong healthy plants are more resistant to disease and/or fungal infection.

CalPac applied at 6-8L/ha during tillering can enhance nutrient uptake and crop growth in situations where soil salts are elevated. CalPac at 7-12L/ha pre-flowering can improve Calcium availability for grain development.

CalPac application would be most beneficial where:

- Soil Nitrogen or Phosphorus levels are adequate yet plant uptake is poor due to soil constraints of salts or sodicity. Calcium can aid Nitrogen and Phosphorus uptake and conversion to proteins.
- There are high sap salt levels. Soluble Calcium can reduce the impact of soil salts on plant nutrient uptake.
- Low Calcium is evident from SAP or tissue analysis.

In situations where Nitrogen is required CalPac can be applied with other Nitrogen fertilisers.

For all your foliar requirements please contact your local BioNutrient Solutions representative.



2010 Carbon Based Foliar Support

Now that the winter crop is up and away growers are looking to ensure that they maximise their yield potential for the season. Many crops were planted with lower pre-plant fertiliser rates due to commodity prices and soil moisture constraints.

SAP testing will provide an assessment of the crop's current nutritional status by measuring plant stem nutrient levels. This timely information will enable growers to take appropriate action as needed. SAP testing should begin during tillering.

Ideally crops should be SAP tested three times through the season:

1. Early to mid tillering.
2. Mid tillering and jointing.
3. Booting and heading.

These three stages are important because during tillering the number of heads per hectare is determined. Through jointing the number of grains per head is set and during booting and heading the grain weight is determined.

Testing crops through GS14 to GS30 will help identify early crop nutritional status. In the early growth

stages there is a greater need for Phosphorus and Zinc, important nutrients in early root development and plant vigour. Strong active root systems will enhance crop yield potential.

SAP testing as the season progresses will determine Nitrogen levels during jointing and booting (GS30-GS50), while also identifying levels of key nutrients such as Calcium and Boron. Calcium improves Nitrogen and Phosphorus availability to the plant. It is an essential growth nutrient for cell division and reduced disease susceptibility. While Boron assists with Calcium translocation into new cells and grain set.



Carbon Based Foliar Support for 2010

