

For further information contact John Mulhare @ 086-8229857. Gary Beirne @ 087-2547534

#### **Special points of interest:**

- Multiple constituents, patented biological components and complimentary nutrient profile
- Extremely positive agronomist feedback from a range of crops including cereals, root crops, maize and grassland.
- Environmental and agrochemical induced stress can slow down or reverse the nitrogen assimilation cycle.
- Works to aid and accelerate recovery in "damaged crops",
- Unlocks genetic potential in the better crops by priming the plant for growth!!
- Up to 6% measured increase in photosynthetic capability from an application of Uplift
- Yield response of up to 0.39t\Ha in Spring Barley, and 0.93t\Ha in Winter Wheat from a single application
- Up to 14% increase in protein content in milling wheat.
- Up to 15% increase in TGW
- Suitable for a wide range of crops including cereals, oilseeds, potatoes, peas, beans and maize
- Max Rate 5.0L\Ha
- Typical application Rate of 3.0L\Ha
- Add to the tank last!
- Widely compatible with agrochemicals, the one known exception being phenoxy type herbicides such as CMPP.



# **Uplift ATG**

# The Yield Building Product that unlocks potential in Healthy Crops and stimulates growth and recovery in Stressed Crops

Unlock the Genetic Potential!!

# **Multiple Constituents** – Pidolic Acid, R100, Dimethyl Sulphone, Nutrient Complex, and with the added benefits of Aspartic Acid and Tryptophan

Pidolic Acid-In plants, the Nitrogen Assimilation cycle (NAC) sits between the Carbon cycle (respiration) and the nitrogen cycle (growth). Fundamental to this cycle is Pidolic Acid, the lack of which triggers internal stress, and the abundance of which stimulates growth. External stress factors such as drought, excess water, temperature or even chemical stress, reverses the NAC leading to a build up of ammonia to potentially toxic levels and an inability to produce protein for growth.

Under stress conditions, applying Pidolic acid through Uplift aids in the plants recovery by pushing the NAC forwards again, while in healthy plants it maximizes the rate of the NAC leading to increased protein production. growth and yield, thereby unlocking more of the plants genetic potential!!

Other components of Uplift include:

Aspartic Acid— Critical in the Carbon (Krebs) Cycle & maximizing mitochondrial ATP production. ATP carries the energy used in cell processes and growth.

Tryptophan-A precursor to auxin, this helps promoting lateral and adventitious roots, shoot growth, cell enlargement and xylem development, thereby helping nutrient flow and plant growth.

R100 - This patented biostimulant increases

# uptake of cationic nutrients (eg Mg), stimulates foliar growth and compliments Pidolic acid and its functions.

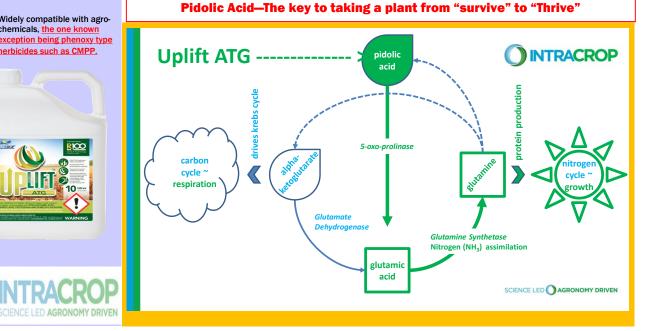
**Dimethyl sulfone** – A unique means of foliar Sulphur delivery to boost enzyme and protein production

#### Complimentary Suite of Nutrients (w/v)

Nitrogen-14% Phosphorous-3% Potassium-5.8% Magnesium-0.25% Boron-300mg/L Copper-600mg/L Manganese-600mg/L Zinc-600mg/L Molybdenum-40mg/L

#### How to Use Uplift to Maximum Effect

Originally the main areas in which Uplift was used were on those crops showing visible levels of stress and catabolism, with treatment leading to rapid visual recovery and growth. However, trial work and grower experience has since demonstrated that the largest responses have been shown to come from applications to the better crops that frequently suffer subclinical levels of stress, often invisible to the growers eye. In these situations Uplift may be considered as a "priming agent" helping to unlock the genetic potential and maximise yields.





# **Striving to Break Through The Yield Plateau!**

Results 2013

# Applications Consistently Increasing Profitability !!!

Unlock the Genetic Potential €€€€€€€€€

 Crops are continually subjected to stress during their growing cycle.

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- These stress events reduce yield!
- Examples of Stress Events Include

#### **Environmental Stress**

- vater logging,
- drought,
- ◊ heat
- ♦ cold

## Chemically induced stress from

- Herbicides
- ♦ Pgr's,
- **Oraminicides**
- Wild oat sprays

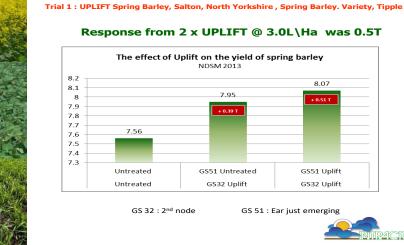
# **Biological Stress**

Initiated by periods of intense growth, such <u>as</u> <u>stem extension on cereals and post flowering in</u> <u>OSR</u>





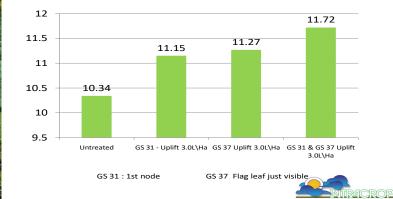




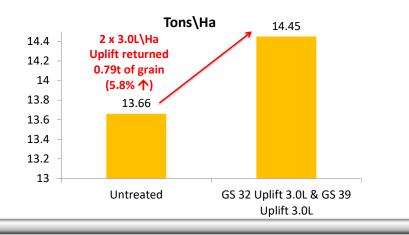
# Results 2013

UPLIFT Yield Response Trial in Winter Wheat. Variety, J.B Diego

## Response from 2 x UPLIFT @ 3.0L\Ha was 1.38T



# Winter Wheat Uplift Trial 2016 - Avatar



28/02/2020

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**TERRACHEM**