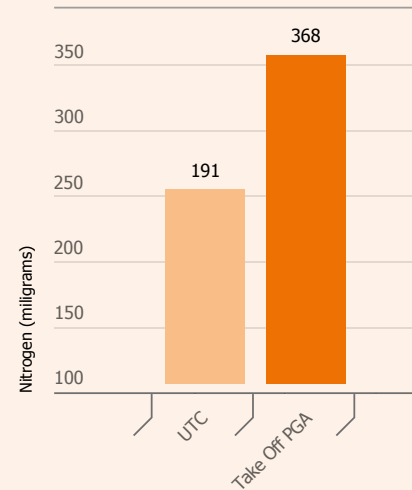


Why use Take Off PGA-Seed Treatment?

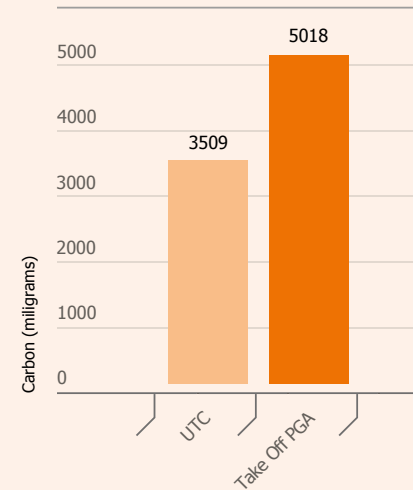
PGA occurs naturally within all plants and aids the carbon cycle to capture carbon dioxide.

Using Take Off PGA as a seed treatment speeds up carbon dioxide fixation in the plant which boosts and increases the availability of this 'foundation stone'. This increased carbon dioxide conversion leads to higher nitrogen utilisation, increasing efficiency and growth.

48% ↑
NITROGEN UTILISATION



30% ↑
CARBON SEQUESTRATION

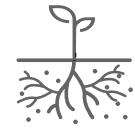


Take Off PGA

Take Off PGA contains two robust biostimulants which promote the growth of strong young plants, and has been the subject of a recent academic review, this has shown the improved effects over untreated:



Improved photosynthesis activity



Increased root mass



Improved nutrient use efficiency



Ability to overcome stress factors - waterlogging and drought

Technical Enquiries

Verdesian Life Sciences Europe Limited, 7 Rotherbrook Court, Bedford Road, Petersfield, Hampshire, GU32 3QG

Commercial Enquiries

Agrii, Moreton Mill, Moreton, Ongar, Essex, CM5 0DP

www.vlsci.com
+44 (0)1730 720 100
admin@vlsci.com

www.agrii.co.uk
+44 (0)1277 899 700
info@agrii.co.uk

Agrii™



TAKE OFF® PGA

PGA - SEED TREATMENT
Stimulation at the start of life

VERDESIAN
THE NUTRIENT USE EFFICIENCY PEOPLE™

Why use Take Off PGA-Seed Treatment?

Take off PGA stimulates the rapid development of the seedling from the first moments of life before the fertiliser and foliar applied chemicals can have an effect. Giving faster developing and stronger healthier plants.

How Take Off PGA-Seed Treatment works

Take Off PGA-Seed Treatment further optimises and accelerates carbon dioxide fixation in the plant, which boosts and increases the rate of nitrogen uptake by the seedling, creating a stronger root and shoot establishment.

What is the result of using PGA-Seed Treatment

This increased carbon dioxide conversion leads to higher Nitrogen utilisation, increasing efficiency and growth, and reduces the risk of environmental effects from drought, waterlogging and adverse pH.



Derisks the plant establishment process

Accelerates seeding emergence



Updates carbon fixation

Optimise energy production, increase nitrogen utilisation and efficiency



Creates stronger root & shoot establishment

Improving nutrient uptake



Reduces the risk of environmental affects

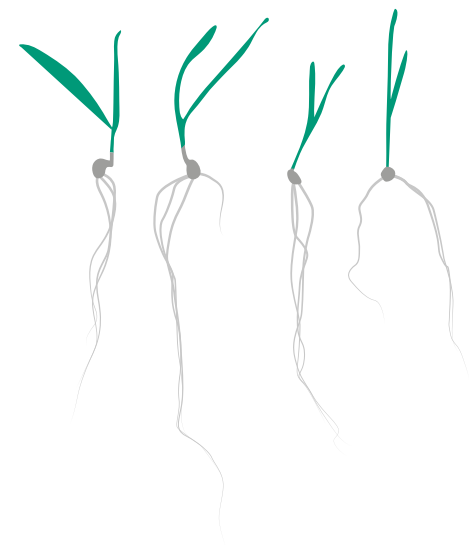
Drought, water-logging and adverse conditions

Proven Increased Energy For Growth

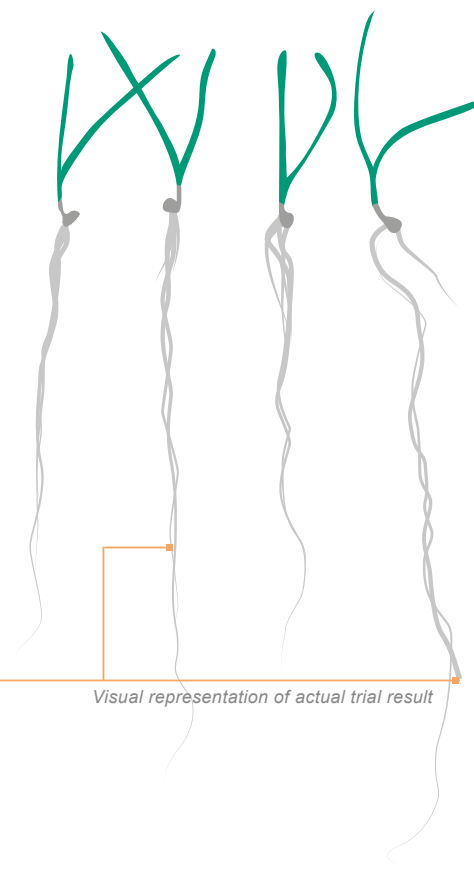
The increase in production of carbohydrate allows more energy for growth as seen below in the treated and untreated plants - only nineteen days from germination.

Trial by AgroChemex May 2018

Untreated



Treated



Faster Root Formation

Importantly Take Off PGA increases not just root length, but also root mass

Visual representation of actual trial result

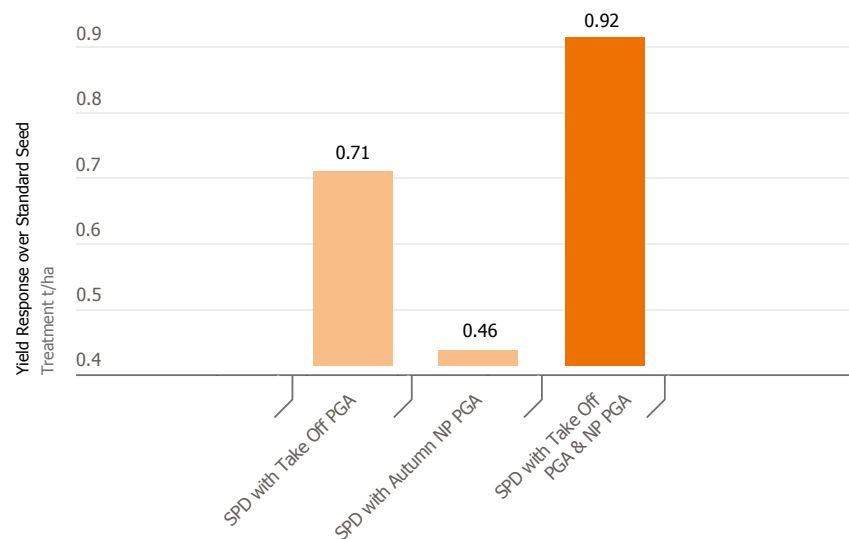
NutriPhite PGA

The use of Take off PGA results in more resilient plants earlier than would otherwise be the case and can be further enhanced by the use of Nutriphite PGA, in the following nutrition and crop protection programme.

This will boost the biostimulant level within the plant to optimise nitrogen uptake and carbon sequestration, enabling the crop to push towards its yield potential.

TAKE OFF PGA FOLLOWED BY NUTRIPHITE PGA ON WINTER WHEAT

Agrii, Barnston P (Yield) = <.004, LSD (Yield) = 0.67 t/ha CV = 11.1%



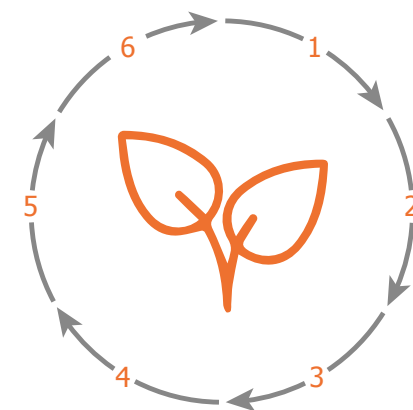
Yield Potential

If a crop cannot compensate well under adverse conditions e.g. Winter barley, or suffers a dormant period of growth that will result in a yield drop e.g. Spring crops, then Take Off PGA will assist in retaining the crop's yield potential.

Seed Treatment Innovation

Over 200 trials coupled with significant grower experience over the last ten years has demonstrated faster and better establishment in winter wheat, winter barley, spring wheat, spring barley, oats, maize and rye.

The Carbon Cycle



Step 1: Apply PGA

Step 2: CO2 fixation increases

Step 3: Carbon metabolism increases

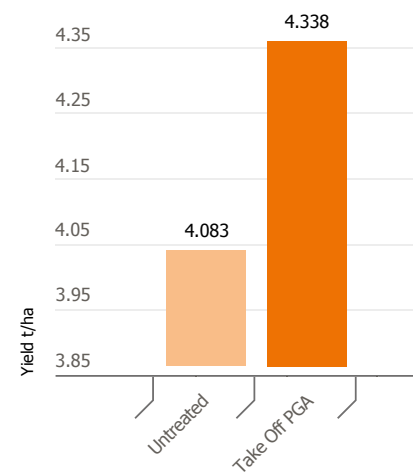
Step 4: Carbon metabolism stimulates uptake and nitrogen fixation (plants start growing faster)

Step 5: Nitrogen metabolism increases (greater nitrogen use efficiency and increased protein levels)

Step 6: Plant makes more metabolite and stimulates itself further

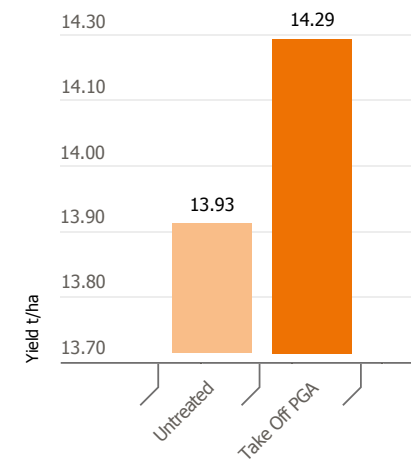
SPRING BARLEY SEED TREATMENT

Spring Barley Laureate NDSM 2016 LSD 0.281 cv 7.85



THE EFFECT OF TAKE OFF ON SKYFALL WINTER WHEAT

Agrii 2015 Leadenham 15248 lsd 0.779 cv 3.5%

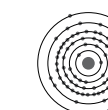


TAKE OFF PGA should be used under all drilling conditions especially if there is an anticipation of poor drilling conditions, for example:



Cold and/or Wet Soils

Boost growth and increase nutrient uptake



Heavy Soils

Especially where a variety like Explorer is grown



Adverse pH, High Calceous Soils

Increased root stimulation



Lack of Compensatory Growth

Winter barley



Lower Seed Rates

Hybrid wheat



Spring & Late Autumn Drilling

Boost to optimise days of growth and post a late harvest crop