



AUGMENTA
PRECISION AGRICULTURE · REDEFINED

AUGMENTA'S PGR VRA

AUGMENTA Agriculture Technologies



Excessive PGR Application Risks



Agronomically

Fixed rate application of Plant Growth Regulators (PGR) indiscriminately inhibits plant growth (see plant height plots) even in areas where it might have an adverse effect on productivity .



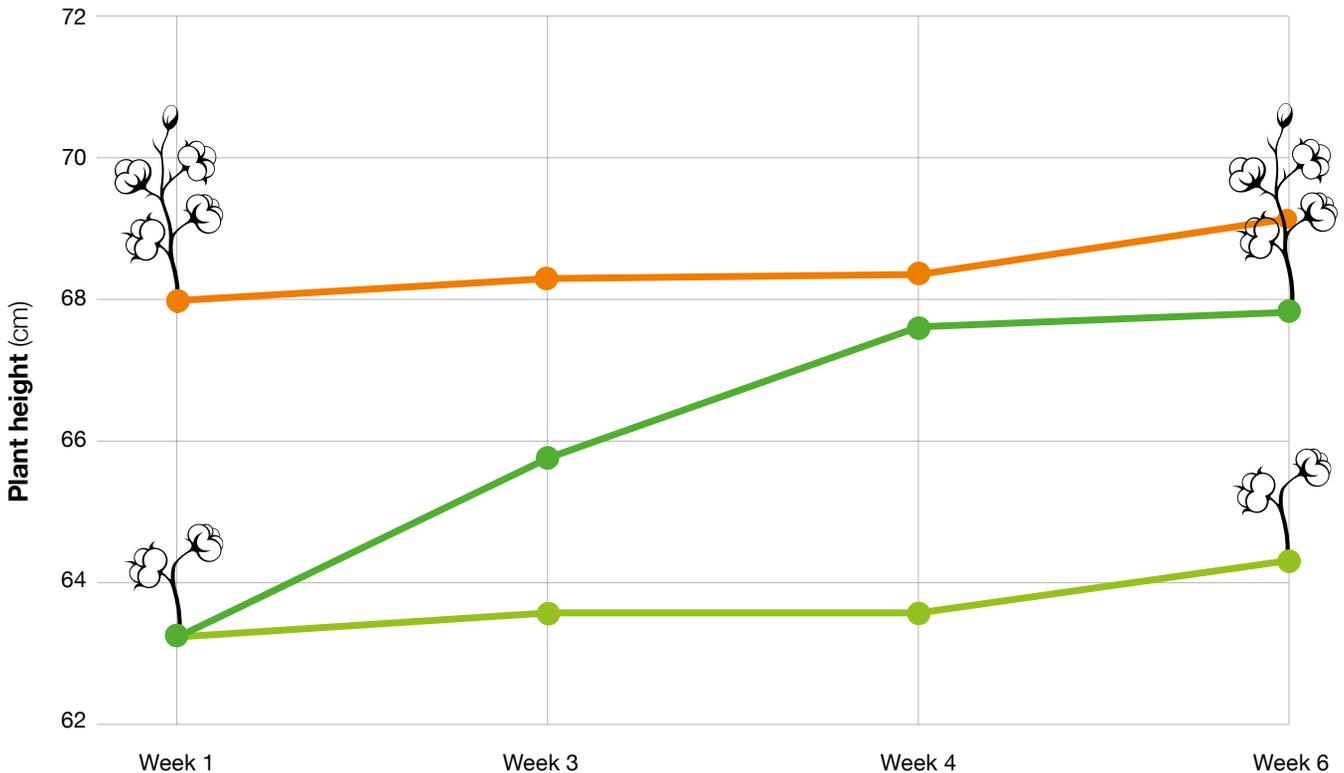
Financially

Unnecessary inputs in multiple operations increase the cost of production.



Environmentally

Excessive or unnecessary application has an increased environmental impact that might imperil sustainable crop production.



 Tall plants Fixed/VRA

 Short plants VRA

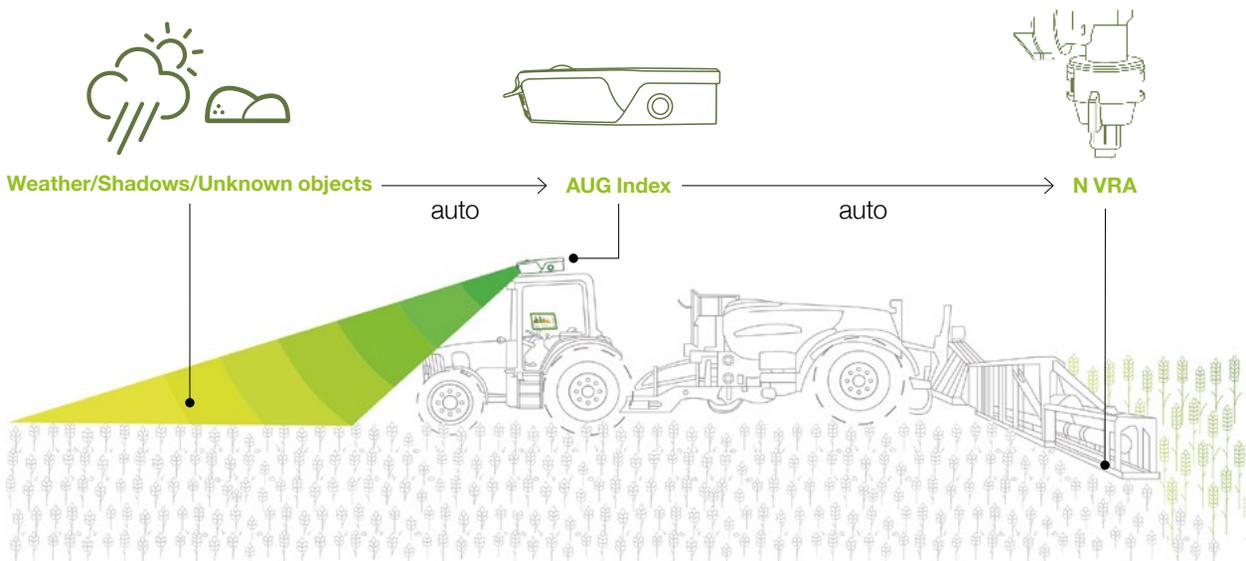
 Short plants Fixed

Our Value proposition

By delivering the optimal amount of PGR at the right place on the field, excessive vegetative growth is inhibited whenever necessary (tall plants fixed/VRA) without compromising growth in areas that have not reached their potential yet (short plants VRA) while producing significant savings for the farmer.

Our Approach

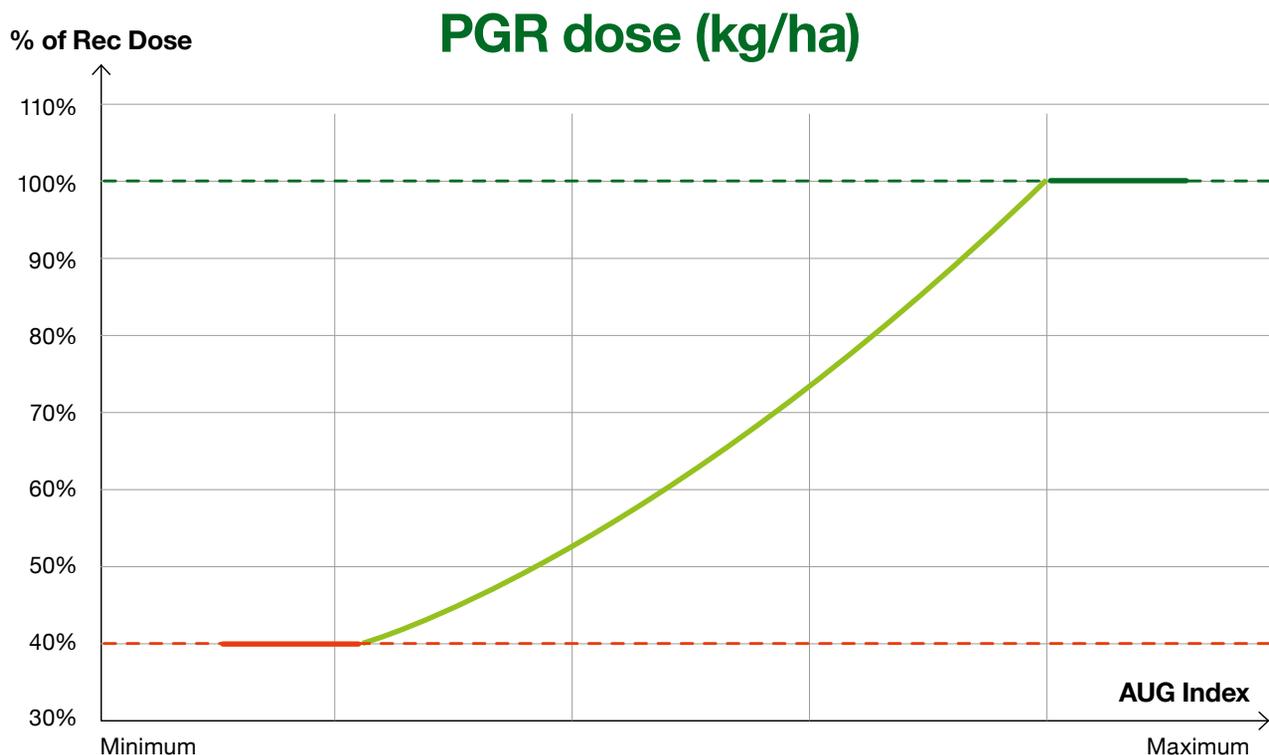
Augmenta Field Analyser is auto-calibrated through a variety of parameters recorded from Augmenta's unique setup, so as to consistently produce a vegetation index (AUG Index) map of a field under variable conditions. This map is then utilised for the realisation of a Variable Rate Application of Plant Growth Regulators (PGR VRA).



Dynamic PGR VRA Operation

During a PGR VRA, Augmenta's dynamic algorithm utilises the AUG Index map to assess and categorize in real time plant biomass of different areas within the field so as to adjust the dose of plant growth regulator implemented. **Identification of the different types of areas is automatic and self-calibrating with no farmer actions required.**

PGR VRA Algorithm Rationale



→ Recommended Dose (Rec Dose) is defined by the farms agronomist or manager and is the **MAXIMUM** dose to be implemented

Low biomass areas

where plant growth has already been inhibited. A minimum dose of PGR will be added to allow moderate plant growth towards enhanced yielding and reduced cost.

Medium biomass areas

where inhibition of excessive plant growth can be achieved even with a moderately reduced dose resulting in increased savings and minimal environmental risks.

High biomass areas

where plants are growing optimally. The maximum dose will be added to prevent excessive vegetative growth that will negatively affect yield.

PGR VRA Fertilizer Application

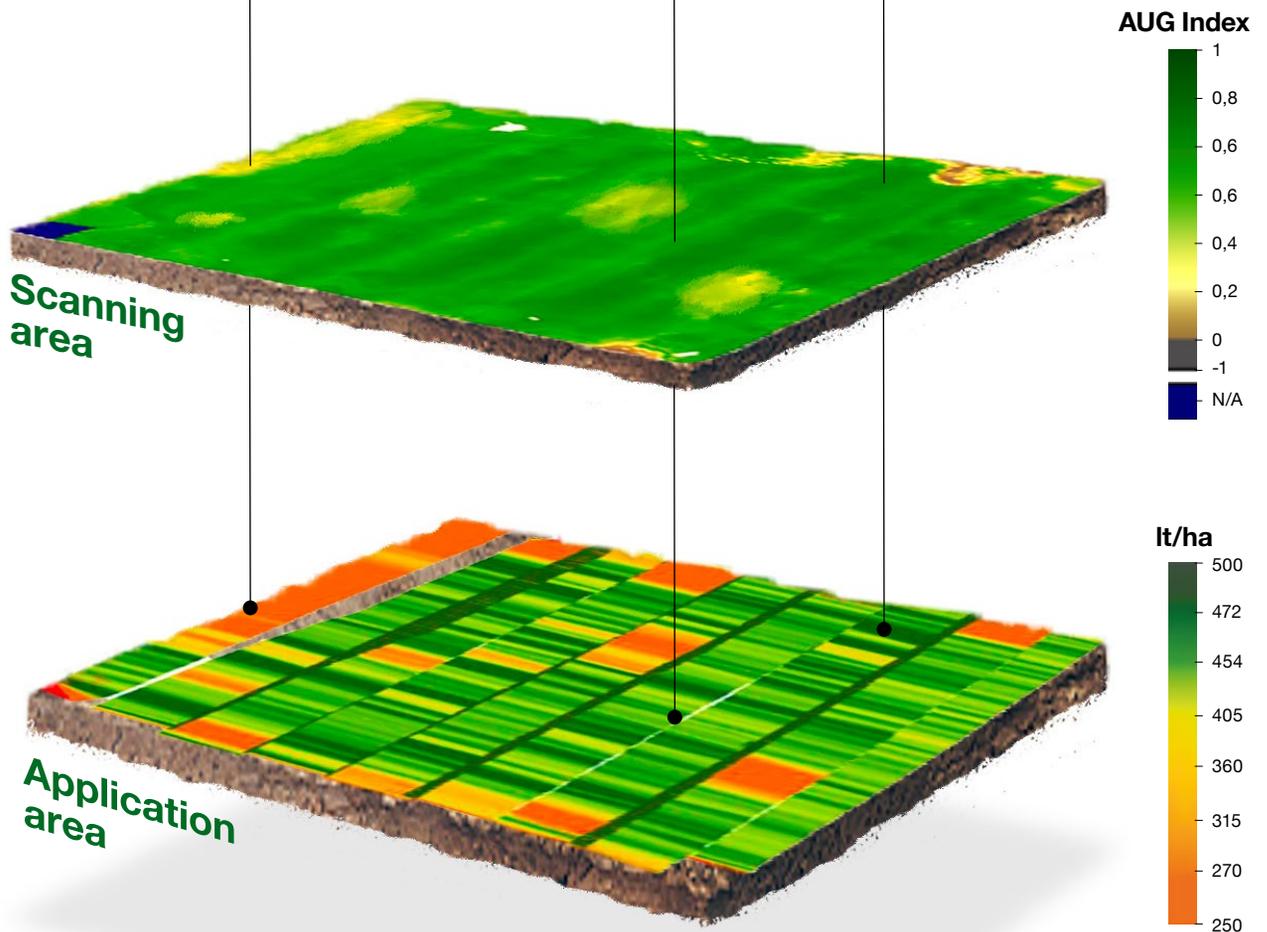
LOW BIOMASS / MAX SAVINGS



MEDIUM BIOMASS / MODERATE SAVINGS



HIGH BIOMASS / NO SAVINGS





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