



**AUGMENTA**  
PRECISION AGRICULTURE · REDEFINED

# AUGMENTA'S HAVRA

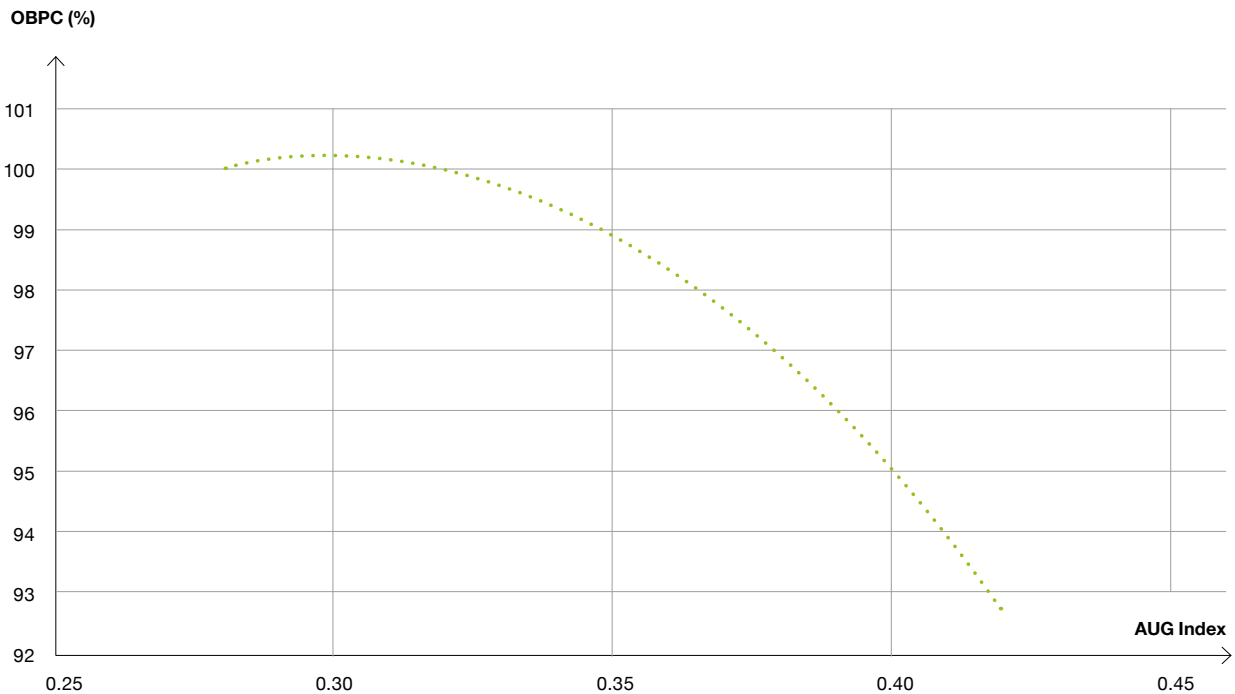
**AUGMENTA Agriculture Technologies**



# Agronomic principle

## Plant Aging

NDVI typically decreases as the percent open bolls (OBPC) increases due to the aging of the plants (senescence). Prescription for HA is typically based on OBPC. Here NDVI becomes a natural substitute upon which HA VRA can be performed.



## Our Value proposition



### Agronomically

By delivering the optimal amount at the right place on the field advanced senescence is induced without compromising yield in areas that have already reached their potential.



### Financially

Reduction of inputs in multiple operations produce increased savings for the farmer.

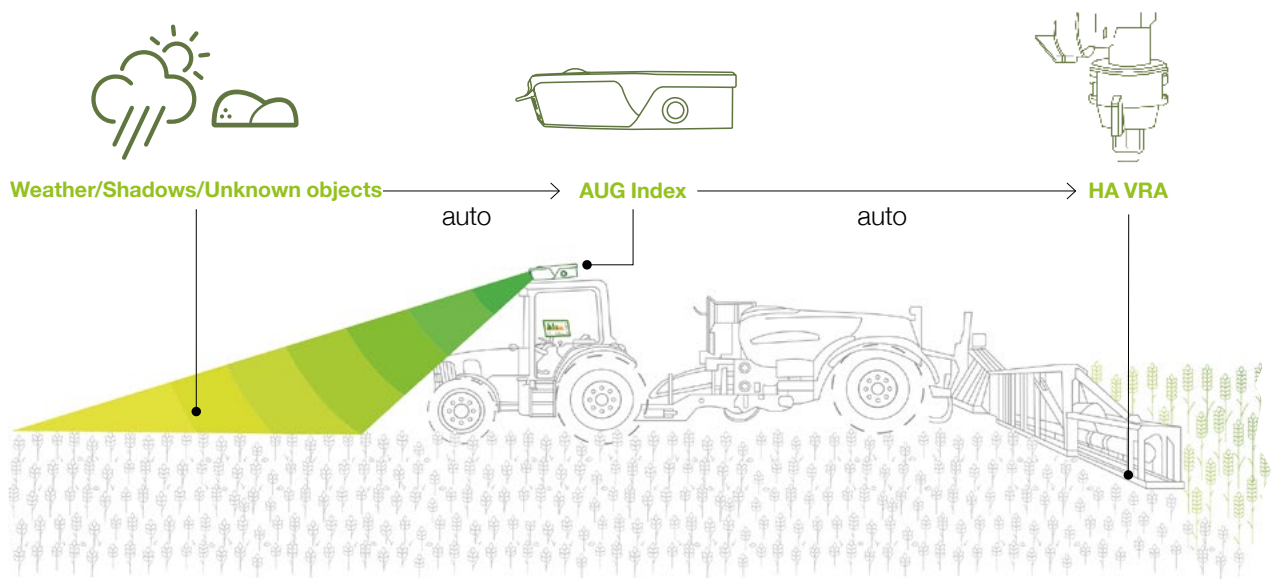


### Environmentally

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

# Our Approach

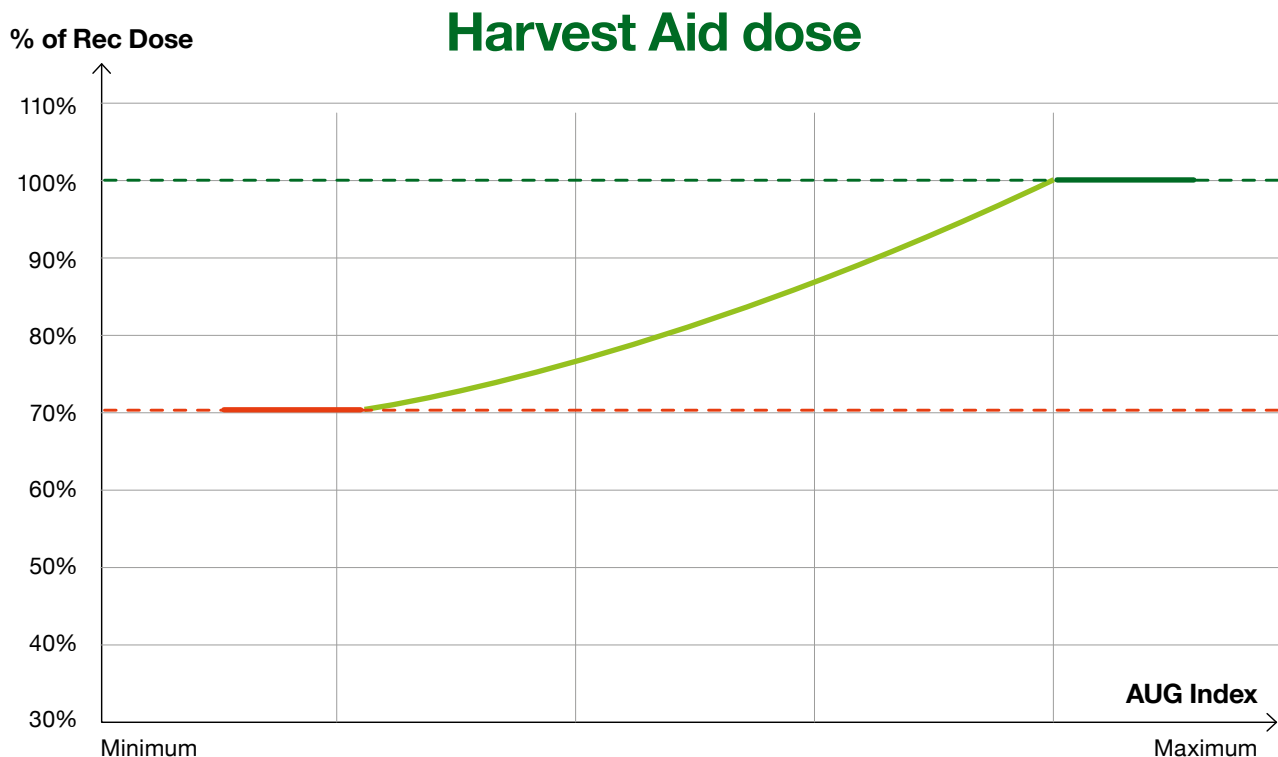
Augmenta Field Analyser is auto-calibrated through a variety of parameters recorded from Augmenta's unique setup, so as to consistently produce a vegetation index (AUG Index) map of a field under variable conditions. This map is then utilised for the realisation of a Variable Rate Application of Harvest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



## Dynamic HA VRA Operation

During an HA VRA, Augmenta's dynamic algorithm utilises the AUG\_Index map to assess and categorize in real time plant senescence of different areas within the field so as to adjust the dose of Harvest Aid implemented. **Identification of the different types of areas is automatic and self-calibrating with no farmer actions required.**

# HA VRA Algorithm Rationale



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

## Limited senescence areas

where the aging of the plants canopy is not visible yet. The **maximum** dose will be added to inhibit further vegetative growth that will negatively affect yield and diminish the quality of the product.

## Medium senescence areas

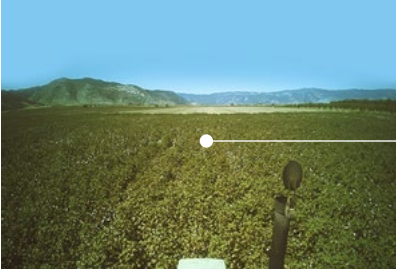
where some signs of aging (yellowing) are visible and acceleration of senescence can be achieved even with a **moderately** reduced dose resulting in increased cost saving and minimal environmental risks.

## Advanced senescence areas

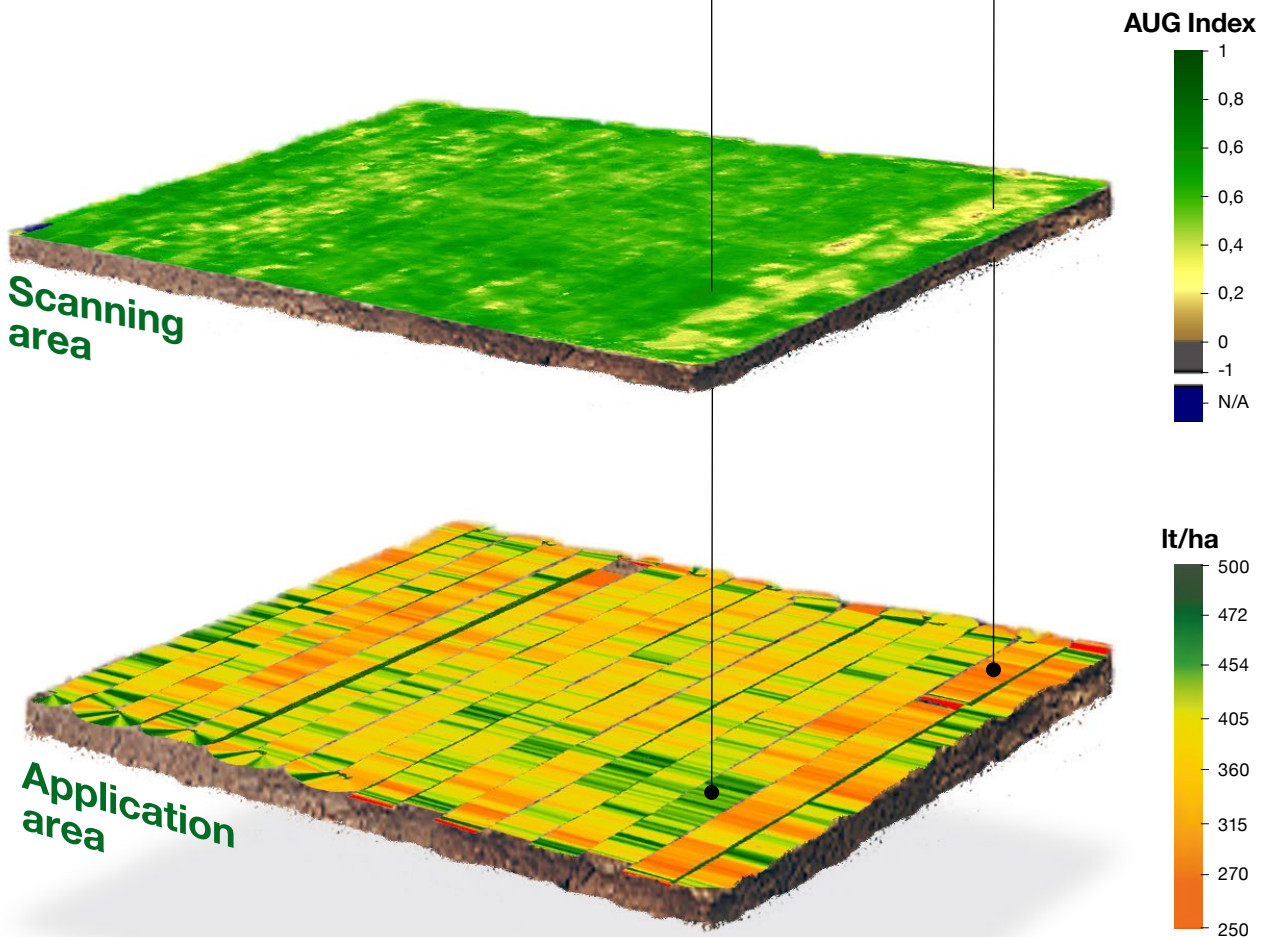
where plant growth has already started to significantly decline. A **minimum** dose of HA will be added to prevent diminishing of yield in areas that have already reached their potential.

# Harvest Aid Variable Rate application

ADVANCED SENESCENCE / MAX SAVINGS



HIGH BIOMASS / NO SAVINGS







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