

AMVAC offers a range of crop input and precision application technologies to help arrest climate change, while advancing environmental quality, water conservation and biodiversity.

• Precision Application Technology: we have developed and commercialized SIMPAS[®], a patented, multi-product, variable-rate precision application system that enables a grower to apply multiple

crop inputs at low rates as per an agronomist's prescription in a single pass. SIMPAS in effect reduces the grower's environmental footprint by placing inputs only as needed, where needed and can significantly reduce water usage. To the right is a sixteen row SIMPAS system in operation.



 Green Solutions: AMVAC markets over 80 plant- and soil-health solutions globally, including biofertilizers, biostimulants and microbials that serve to serve to provide plant nutrients, improve bioavailability of those nutrients and enhance the soil microbial community. Led by our Agrinos business, which ferments microbials and extracts animal-based nutrients in its own facilities, our Green Solutions team is focused on providing solutions that can foster sustainable farming for future generations while reducing the GHG profile of our users.



 Carbon Credit Market: In connection with SIMPAS, AMVAC has also developed a patented MRV (measure, record, validate) technology called Ultimus[®], which enables one to track product from factory to field and back and, more important, to measure exactly what has been applied to a field (and where). When linked to a permanent ledger like Blockchain, Ultimus provides an immutable

Ultimus enable	s validated	traceabili	ty of all SII	MPAS-applied
Solutions, b	ut <u>Ultimus</u>	<u>technolog</u>	y can be en	1 <u>ployed to</u>
<u>enal</u>	ble traceab	ility of ALI	, crop input	t <u>s</u> .
	Right	Right	Right	Right
	Product	Time	Place	Rate
SIMPAS Applies	•	•	•	•
ULTIMUS Records	•	•	•	•

record of the grower's activities in the field. Ultimus, then, provides the ideal solution for the fast-evolving carbon credit market, which will require growers to report on what they have used on their farms. Because it can measure any sort of input that is RFID tagged, Ultimus is the ideal MRV technology.

Taken together, these technologies would potentially enable a grower to apply a lower rate of synthetic fertilizer in conjunction with nitrogen fixating microbials and, in turn, generate a permanent record of his or her activities. With that record, the grower could calculate the relative GHG benefit, while advancing climate change and environmental objectives.