

FIELD FACTS

PROACQUA® NUTRITIONAL PROGRAM INCREASES YIELD IN WATERMELON PRODUCTION

KEY FINDINGS:

PROACQUA NUTRITIONAL PROGRAM

INCREASES MARKETABLE YIELD
BY AS MUCH AS

+9.5 TON/AC

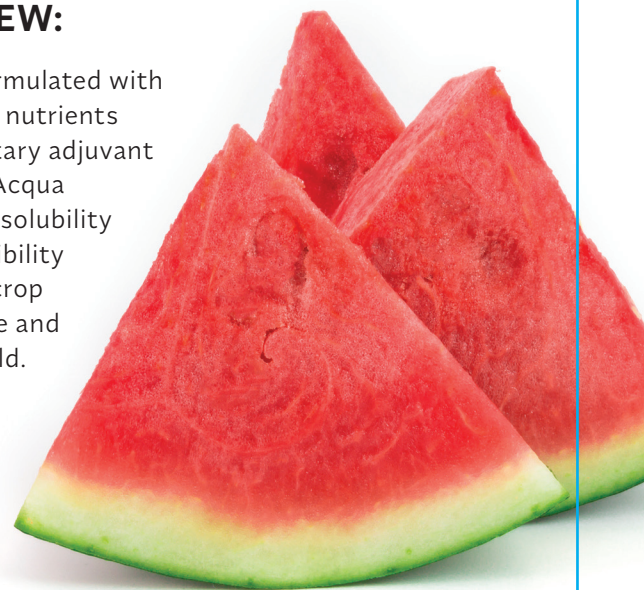
VS. THE GSP ALONE

OBJECTIVE:

Demonstrate the benefit of ProAcqua water-soluble nutrients in watermelon production in Florida and Arizona by implementing trials with third-party research cooperators.

OVERVIEW:

Uniquely formulated with high-quality nutrients and proprietary adjuvant blends, ProAcqua delivers the solubility and compatibility to improve crop performance and promote yield.



TRIAL DETAILS:

Location(s): Immokalee, FL and Yuma, AZ

Trial Design: Small Plot, Randomized Complete Block Design w/Five Replicates

Crop: 'Bijou' Watermelon (FL) and 'SV 0258' Watermelon (AZ)

Soil Profile:	FL: pH = 6.2	CEC = 6.6 meq/100g	OM = n/a	Soil Texture = Sandy Loam
	AZ: pH = 7.8	CEC = n/a	OM = 1.3%	Soil Texture = Sandy Loam

Stats: General Linear Model,
Least Squares Means Student's t ($P \leq 0.10$)



TREATMENTS:

Florida

1. Grower Standard Practice (GSP)
2. GSP w/ProAcqua Program (Fig. 1)

Arizona

1. GSP
2. GSP w/Restore
@ 4 oz/ac x 4 Foliar Nutrient Applications
(4, 7, 11 and 13 Weeks After Treatment, WAT)

Figure 1. ProAcqua Program

Product	Application Method	Application Rate	Application Timing
SPRING	DRIP IRRIGATION	10 lb/ac	2 WEEKS AFTER TREATMENT (WAT)
ELEVATE	FOLIAR	4 oz/ac	4 WAT
FLOW	FOLIAR	3 lb/ac	5 WAT
FLOW	FOLIAR	3 lb/ac	7 WAT

RESULTS:

FLORIDA

Application of the ProAcqua program significantly increased yield by 9.5 ton/acre relative to the Grower Standard Practice (Fig. 2). The program consisted of Spring (12-40-12) + micronutrient package, Elevate (Mo, Ni, Co) and two applications of Flow (5-10-20 Mg, S, B), which complements the GSP to promote plant growth and increase yield.

RESULT: +9.5 tons/ac

Marketable watermelon yield (Florida)

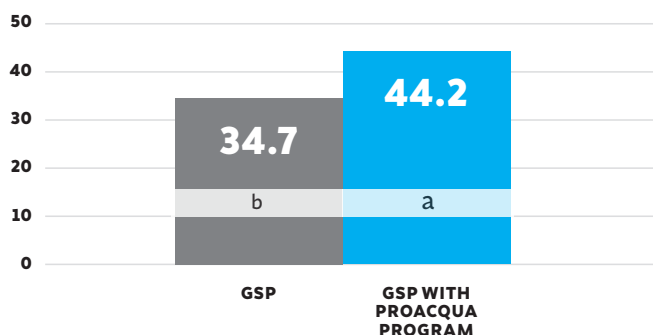


FIGURE 2. Marketable watermelon yield (ton/ac) under normal growing conditions in Florida. $P < 0.05$, $SD \pm 4.3$



RESULTS:

ARIZONA

The local growing area experienced considerable heat stress, such that the third pick was unmarketable. Under these conditions, two applications of Restore significantly increased yield in the first two picks by a total of 5.2 ton/ac (Fig. 3). Stress mitigation is one of the key benefits of ProAcqua Restore.

RESULT: +5.2 tons/ac

Marketable watermelon yield (Arizona)

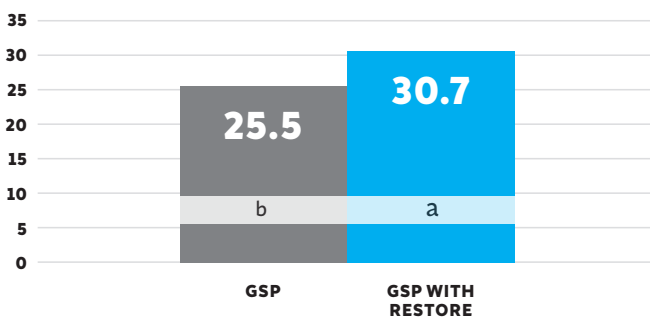


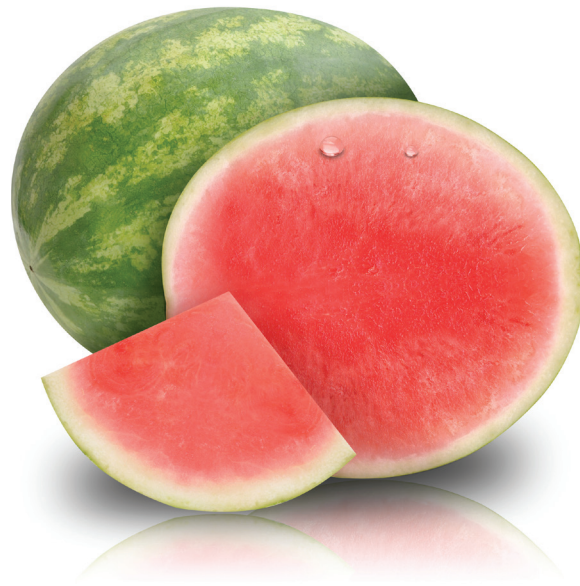
FIGURE 3. Marketable watermelon yield (ton/ac) under conditions of heat stress in Arizona. $P < 0.05$, $SD \pm 2.4$ ton/ac

SUMMARY:

Under normal growing conditions in Florida, a ProAcqua Nutritional Program increased watermelon yield by 9.5 ton/acre. In Arizona, where heat stress conditions rendered the third harvest unmarketable, ProAcqua Restore increased yield in the first two picks by a total of 5.2 ton/acre.

ProAcqua Restore (0-42-26 Mg, S, Cu) is derived from phosphorous acid, a source of phosphite ions, that helps plants produce the natural components that mitigate stress. **Apply ProAcqua Restore as part of a balanced fertility program under conditions of stress.**

ProAcqua Flow (5-10-20 Mg, S, B) is a high K formulation complemented with other macro and micronutrients that is designed to help transport sugars during the last stages of fruit development in high yielding crop systems. **Under high yielding conditions, apply ProAcqua Flow to supply potassium when the plant needs it the most.**





**For more information visit
proacquanutrients.com or compasscrops.com.**

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