



GROWING SMARTER

News & Information to Help You Grow

Gearing Up For The Cotton Season

With the cotton season winding down and the next one fast approaching, many growers may be planning ways to ensure a trouble-free season resulting in a bountiful

harvest. Working closely with your PCA and field rep is a good start, but it's also a good idea to see what other local growers are doing. Greg Pierce is a successful cotton grower

in the Gila Bend and Harquahala areas, planting about 2,000 acres. Pierce has always managed his operation by sticking to the basics, and enlisting help from others, including his Fertizona rep.



"We use 449 and 422 variety Delta Pine seeds with Bollgard® and Roundup Ready® stacked gene technology," Pierce says. "We plant one row out of six with non-BT cotton which has worked well for us over the years."

Pierce has been growing cotton, alfalfa and durum wheat for nearly 30 years and his father Ted Pierce has been farming in Central Arizona since 1954.

Pierce believes strongly in a tried and true fertility program to ensure his crops get the nutrients they need, when they need them.

(Continued on Page 2)

Preparation and help from his Fertizona rep has benefited Greg Pierce with consistently high-yielding and healthy cotton crops.

IN THIS ISSUE

Performance Profile

Getting Ready For
The 2004 Corn Season

3

New Product Spotlight

Burn-It Supercharges
Your Herbicides

4

Q & A

Fertizona Answers Your
Questions

6

COMPTON'S CORNER

We're Making Sure You Don't Come Up Short

There has been much talk about the natural gas shortage that is currently threatening fertilizer supplies. Due to increasing residential and industrial energy needs, cleaner-burning natural gas use is rising and consequently, so are prices. Since natural gas makes up more than 70 percent of the cash cost of producing ammonia, its natural that fertilizer prices are becoming more volatile.

Unfortunately not a lot of people are doing much except talking about this problem. Some may be even hoping it goes away. The good news is, Fertizona is now taking extra steps to ensure our growers have a constant supply of fertilizer to provide your crops with vital

nutrients. From anticipating market conditions, to constructing new nitrogen storage tanks to hold an ample reserve of fertilizer, we are going the extra mile to make sure the natural gas shortage has minimal effects on our customers.

We want to know what you think about the natural gas shortage? Have you seen the effects of the natural gas shortage? What do you think Fertizona should be doing to deal with this problem? E-mail me at jcompton@fertizona.com with your comments and suggestions. Together, we can make sure the supply of nitrogen in Arizona is not jeopardized.

Jim Compton
President, Fertizona

Jim Compton, President, Fertizona



Gearing Up For Cotton Season [Continued From Page 1]

"For our cotton, we like to have at least 80 available units of phosphate at pre-plant, and then at about the first bloom stage we come in with about 50 units of UN-32," Pierce explains. "At the first heavy-bloom stage we apply about 85

units of UN-32 and then we usually put in a third application of UN-32 right around the first of August with about 65 units."

Pierce cites his biggest pest problem as whiteflies. "My brother-in-law Greg Jacobsen is a PCA and he scouts the fields twice a week," Pierce relates. "We have to put on Knack® to take care of the whiteflies."

Pierce gets good results with Knack, which is an insect growth regulator that has proven efficacious in his cotton-growing operation. He cites his Knack supplier, Fertizona, as being a good partner that has brought value to his business.

Taking care of pests early will ensure a successful season resulting in a bountiful cotton harvest.

"I think Fertizona has very competitive prices and good application equipment," Pierce explains. "They're a first-class outfit and we've been working with them for a long time."

Fertizona offers Delta Pine cotton varieties as well as those of Stoneville, Bayer and Arizona Cotton Growers. Pierce describes Fertizona as a quality company that has helped him manage his cotton-growing operation.

"We've never had a problem with Fertizona, they stand behind the products that they sell," Pierce adds. "And if there is a problem, they follow through and make sure we're taken care of." ▲

Knack is a registered trademark of Valent USA Corporation.

Bollgard and Roundup Ready are registered trademarks of Monsanto Company.



Getting Ready For The 2004 Corn Crop

In less than three months, early corn will be planted in Arizona. With that in mind, now is the time to tune-up corn planters and identify any problems that may stand in your way. Growers must be on the lookout for the following: underpopulation, overpopulation, uneven output from one corn planter box to the other, planting too deep, planting too shallow, and uneven planting depth.

One thing growers need not dwell on is seed size. Study after study has revealed that seeds of any size and shape exhibiting the same germination and vigor to produce equal yields.

Let's review a few facts that will help you get your crop off to a good start.

Soil Preparation

Hard soils not only reduce root growth but also limit the availability of certain key nutrients, including potassium and phosphorous. Corn, alfalfa, and cotton all need an open, mellow rooting zone to reach their full yield potential.

Pre-irrigation

Filling up the soil profile with water will make a big difference in the crop as it continues to grow. Water demands of fast growing crops need the

deeper moisture to sustain growth. Later on it is difficult to get enough water into the lower root zone.

Seed Germination

Placing seed into a well, prepared seedbed of soil containing optimum texture, moisture, oxygen, adequate temperature, and nutrients surrounding the seed will ensure rapid germination. Make sure that seed germination is of quality that will provide for quick seedling emergence.

Plant Nutrition

Corn is a heavy nutrient user, as the chart below reveals. A 6-ton per acre grain corn crop or a 32-ton per acre silage corn crop will require the following:

Nutrients/Ton	Lbs./Ac Used
Nitrogen	250
Phosphorus	90
Potassium	250
Sulfur	30 elemental S; 90# SO ₄
Zinc	.7
Copper	.17
Boron	.17
Manganese	1.7
Iron	7.0
Magnesium	65
Calcium	90

quickest emerging hybrid and has provided some of our biggest yields. Please see the following comments from two satisfied Arizona growers.

"I was pleased with 4693, even though it didn't yield as much as the year before. Last year we hit 34 tons/acre with 4693. The feed value of 4693 was good. 4693 stood well. A big advantage of 4693 this year was its stay-green ability in extremely hot weather conditions. When we plant spring corn again, we will use 4693."

Loren Pratt, Pratt Farms
Maricopa, AZ

Yield: 29 tons/acre @ 73% moisture

"We put the 4693 on our toughest soil. I have one field that had lots of manure applied per acre and it was a healthy, strong plant. The reason I liked it was because it had strong germination, good growth and harvested clean. We liked 4693 and will use it again this year. We will use at least half of our acreage to 4693."

Artemio Mendoza, Sonoma Farms
Chandler, AZ

Yield: 30 tons/acre @ 70% moisture

N8214

N8214 has been a consistent, dual-purpose corn for ten years in the California/Arizona market. N8214 provides a superior quality package compared to many silage corns and has a wide harvest window.

PX93

A long-time silage favorite in Arizona, PX93 has excellent stay-green and has proven to be a big yielder over many years in Arizona.

Please contact your Fertilizer rep for more information about NK Brand corn products for your 2004 corn program. ▲

By Ed Wintzel, Northrup King

NK Brand Corn Products for Arizona

NK Brand Corn products have been a clear choice of Arizona silage corn producers for years. Please consider the following NK Brand hybrids for your 2004 planting needs:

4693

4693 is NK's biggest seller in the West. 4693 handles tough soils, is our

Jim Holland (L) of Fertilizer helped Artemio Mendoza grow NK4693 corn in tough soils.



NEW PRODUCT SPOTLIGHT

Supercharge Your Herbicide With Burn-It

Growers are always trying to do more with less. Whether it's using a stacked gene seed technology or a blended fertilizer with slow-release nitrogen, growers are wisely looking for products that go the extra mile so you get more bang for your buck.

Luckily, there is a new product available exclusively from Ferti-zona that does just that. It's called Burn-It and it's a surfactant that can be used with most herbicides to improve penetration and absorption of the leaf cuticle. Adding Burn-It to the mix magnifies the benefits of your crop protection products.

"Burn-It not only spreads well, but also enhances the efficacy and uptake of postemergent herbicides," says Dennis Osborn, Crop Protection Sales Manager for Ferti-zona.

"It's a recipe we developed of methylated seed oil and paraffin, that basically heats up the herbicides to control weeds faster and more effectively."

University research has substantiated the benefits of methylated seed oils for improving the performance consistency of postemergence herbicides such as Pursuit®. The results of this surfactant's improvements



provide financial benefits as well.

"Burn-It will save growers money in the long run by increasing uptake and saving you a re-treatment,"

adds Osborn. "It has shown good results with Roundup®, Poast®, Pursuit and Staple®. Burn-It makes an average application look like a super application."

This unique surfactant may also provide better crop safety than crop

TECH HELP ADJUVANT USAGE GUIDE

	Supr Spread	Burn It	Ferti-zona Spreader Buffer	Ferti Spread
Active Ingredient	Nonylphenoxyhydroxypoly	MSO / Paraffin	Alkylarylpolyoxyethylene glycol	Alkyl polyoxyalkylene ether
Description	90% non-ionic spreader, activator, soil penetrant, and defoamer	Methylated seed oil-based spreader, activator, adjuvant, and penetrator	Spreader, activator, and buffer	Economical spreader, activator, adjuvant, and defoamer
Usage	Use for general spreading of crop protection products. For use on all crops, turf & ornamentals. Use also to improve wetting of soil for increased water penetration and to control dust.	Use to improve penetration of leaf cuticle and absorption of herbicides. Replaces crop oil concentrates. Use with sulfonyl ureas, glyphosate, Poast, etc.	Use to increase wetting and give a more uniform coverage of agricultural chemical sprays.	Use for general spreading of crop protection products. For use on all crops, turf & ornamentals. Use also to improve wetting of soil applied products.
Rates per 100 Gallons¹				
Acaricides and Fungicides	2 - 8 fl. oz 2 - 8 fl. oz ²		½ - 2 qts.	2 - 8 fl. oz 2 - 8 fl. oz ²
Insecticides	2 - 8 fl. oz 2 - 8 fl. oz ²		½ - 2 qts.	2 - 8 fl. oz 2 - 8 fl. oz ²
Herbicides	½ - 8 pints	16 - 32 fl oz 1 ½ - 2 pints ²	½ - 2 qts.	½ - 3 pints
Defoliant and Desiccants	½ - 8 pints		½ - 2 qts.	½ - 3 pints
Wettable Spray Powders				
Protectant Products				
Benefits	Better coverage and penetration of plant surfaces. Greater effectiveness of foliar and soil applied products.	Heats up herbicides, resulting in faster, more effective control. Better crop safety than C.O.C.'s.	Useful when both a spreader and a buffer are needed.	Better coverage and penetration of plant surfaces. Greater effectiveness of foliar and soil applied products.
Package Sizes	1 gal., 1 pint	2.5 gals., 1 pint	1 gal.	1 gal.

¹ Pesticide labels have precedence over any other labels. ² Rates per Acre

oil concentrates (C.O.C.) by minimizing phytotoxicity due to sprayer overlap. Growers concerned about the effects of overlap should definitely look into Burn-It as a potentially safer alternative to their current herbicide surfactant.

According to Fertizona's Fennemore manager Craig Allen, the enhancement of your current herbicide program with Burn-It extends to turf as well, with substantial results. "With the broad-leaf tough winter weeds, this product

just smokes them," Allen says. "I've seen weeds thirty minutes after an application with Burn-It that are already stressing."



Application rates range from 1.5 to 2 pints per acre. The 2 pint per acre rate may be required for extreme weed populations or stressed crops. Please consult your Fertizona rep for more information on rates and the many benefits of Burn-It. ▲

Pursuit and Poast are registered trademarks of BASF. Staple is a registered trademark of The DuPont Company. Roundup is a registered trademark of Monsanto Company.

Burn-It can enhance the benefits of your current herbicide program.

Ferti Hume	Ferti Buff	Ferti Oil	Ferti Stik	Sil Spread	AMS Premium Liquid
Alkylaryl poloxylkane ether	Phosphoric Acid	Vegetable seed oil	Phenol resins	Silicone	Ammonium sulfate
Non-ionic low-foam type surfactant, activator, spreader, penetrator, and adjuvant	(Nutrient) Buffer/Acidifier	Cottonseed oil-based adjuvant and dilutant	Spreader-sticker, protectant	Non-ionic organosilicone surfactant, wetting agent, and penetrator	Liquid AMS water conditioner, activator, and defoamer
Incorporates the properties of a spreader and an activator when used with agricultural pesticides.	Reduces pH of spray water to below 7. Helps prevent alkaline hydrolysis and calcium tie-up of crop protection products.	Use wherever an oil-based adjuvant is desired and with low-volume applications.	For use with insecticides, fungicides, acaricides, pesticides, and protectant sprays. Forms a rainfast film that resists weathering and enhances the efficacy of pesticides.	Enhance the spreading and penetration of pesticide sprays when properly applied, especially on leafy vegetables and other crops with heavy foliage.	Use with herbicides, defoliant, and desiccants whose activity is enhanced by the addition of AMS. Use with glyphosate, Raptor, 2,4-D, Desiccate II, etc.
			4 oz - 16 oz		
½ - 2 pints ½ - 1½ pints ²	1 - 2 qts. ²	1 qt. ²	4 oz - 32 oz	2 - 12 oz ²	
1 - 2 pints ²		1 qt. ²			Optimum rate 2.5 gals.
1 - 2 pints ²					Optimum rate 2.5 gals.
			4 oz - 24 oz		
			16 oz - 32 oz		
Enhances herbicidal activity.	Maximizes the performance of crop protection products.	Improves spreading and reduces evaporation of crop protection products.	Multi-use product incorporating various use benefits.	Enhances spreading and penetration of pesticide sprays.	Improves effectiveness of herbicides sensitive to hard water.
1 gal., 5 gals.	1 gal., 5 gals.	2.5 gals.	1 gal.	1 qt.	2.5 gals., 1 pint

Q & A

WHEAT

Q. “I’m concerned about protein in my durum wheat. I want to make sure I keep nitrogen levels up throughout the season so my protein stays at 13 percent. What do you recommend to maintain protein?”

A. Several of our growers have experimented with a pre-plant application of 100 lbs. Of 11-52-0 blended with 100 lbs. of Unity to provide slow release nitrogen, sulfur and minors. I put down some Unity on a corner of a field that was very yellow and it greened up and had more uniform growth than the rest of the field. I’m not sure if it increased yields yet, but based on what I saw, it looks promising. Growers have to make sure to keep enough nitrogen down during the growing season, but the 11-52/Unity blend at pre-plant looks like it helps as a starter fertilizer.

Jim Holland
Fertizona—San Tan

Q. “Because durum wheat protein levels are so important to a successful crop, should I use a blended fertilizer to keep my nutrient levels where they need to be?”

A. I recommend doing petiole tests throughout the season to make sure you’re not deficient in nutrients that may end up lowering protein levels. You may spend a little money for the test, but this will save you a lot of money in the long run by keeping your nutrients up and your crops healthy. Fertizona can create a customized SmartBlend™ fertilizer based on your petiole tests and protein and yield targets to make sure your crops are getting the nutrients they need to thrive.

Jim Holland
Fertizona—San Tan

Q. “I’ve been having problems with weed infestations in my durum wheat crops. What do you recommend for weed control at different stages in the growth cycle?”

A. For broadleaf control, some of our growers have benefited from an application of Clarity® at the 4-leaf stage, MCPA at 4-leaf to boot stage and Buctril® from emergence to boot stage. For grasses, my growers have had success with Achieve®. However, every grower has different needs and climate considerations, so ask your Fertizona field rep to create a herbicide spraying schedule just for your operation.

Tom Montoya
Fertizona—San Tan

Clarity is a registered trademark of BASF. Buctril is a registered trademark of Aventis CropScience. Achieve is a registered trademark of Syngenta.



If you have a question or comment for Fertizona to answer, jot it down and mail it to:

**Growing Smarter, C/O Fertizona, 2850 S. Peart Rd., Casa Grande, AZ 85222
fax: 520.836.3447, or e-mail tcurrie@fertizona.com**

All questions will be answered promptly and if your question appears in a future issue of *Growing Smarter* we'll send you a Fertizona baseball cap.

Fertizona's Mike Arbogast Knows Melons

It's important to plan ahead. Taking extra steps to prevent problems with your growing operation will save you a lot of time, money and headaches in the long run. Mike Arbogast, a field rep from Fertizona's Fennemore location, believes strongly in planning and has achieved success with his growers by doing so.

"My main focus is melons of all kinds," Arbogast explains. "What I really try to do for my growers is catch things before they get out of hand, so you can manage them before they become a large problem."

Serving the Aguila, Salome and Harquahala areas of Arizona, Arbogast has built strong relationships with melon growers and works to provide them with ways to stay ahead of potential problems.

"Our biggest contribution is to serve as another set of eyes on the farm while they're thinking about other things," Arbogast describes. "Leaf miners may show up and can be really devastating, but if we catch them in time we have the tools to control them."

Arbogast describes a major challenge growers currently face is the potential for powdery mildew. This problem can be an extreme detriment to melon crops if it's not handled early on. "If it's in the field, it's already too late. You have to be aware of weather patterns and where it's showing up in



other parts of the state so you can start putting on your preventative program," Arbogast stresses.

According to Arbogast, growers have to deal with their toughest challenges after harvest.



Mike Arbogast, Fennemore field representative.

"The biggest challenges growers face probably involve the marketing of melons rather than growing them," Arbogast says. "On the other hand, melon growers are probably more aggressive and willing to experiment with and adopt new technologies because there's a greater potential for a return on investment than there might be in some other crops."

In Arbogast's area, watermelons are planted in late January and early February in mid-bed trenches under plastic to keep them from freezing.

In mid-February until the first of March, cantaloupe planting begins. Arbogast recommends that growers implement strong cultural practices to prevent problems, such as not putting mixed melons next to cantaloupe crops.

When he's not helping his growers manage their operations, Arbogast enjoys outdoor activities including camping and four-wheeling. He holds a degree in Ag Business from Arizona State University. ▲

NEW EMPLOYEES

Fertizona would like to welcome the following people to the Fertizona team.

**Santan — Guy Sabori
Driver**

**Willcox — Jack Crawford
Mixer and Driver**

**Fennemore — Marty Latta
Turf and Specialty Sales**

GROWING SMARTER

FERTIZONA LOCATIONS

Fertizona—Casa Grande Main Office

2850 South Peart Road
Casa Grande, AZ 85222
(520) 836-7477

Dennis Osborn—Crop Protection
Gene Kempton—Seed Products
Jimmy Compton—Crop Nutrition
Lamont Lacy—Credit Manager
Larry McGee—Lawn & Garden
Barbara West—Controller

Fertizona—Buckeye

26705 West Baseline Road
Buckeye, AZ 85326
(623) 386-4491
Tim Walsh—Manager

Fertizona—Coolidge

P.O. Box 208
Pima Coolidge Industrial Park
Coolidge, AZ 85228
(520) 215-9521
Pat Cockrill—Manager

Fertizona—Fennemore

171 West Olive
Waddell, AZ 85355
(623) 935-4252
Craig Allen—Manager

Fertizona—Roll

4212 South Avenue 39E
Roll, AZ 85347
(928) 785-9016
Doug Canan—Manager

Fertizona—San Tan

P.O. Box 100
San Tan Industrial Park
Sacaton, AZ 85247
(520) 836-0103
Tom Montoya—Manager

Fertizona—Thatcher

4257 US Highway 70
Thatcher, AZ 85552
(928) 428-3161
Steve Marshall—Manager

Fertizona—Willcox

512 East Maley
Willcox, AZ 85643
(520) 384-2264
Tom Hunt—Manager

Fertizona—Yuma

4290 East County 10½
Yuma, AZ 85365
(928) 344-9806
Mike Espil—Manager

Fertizona De Mexico

KM. 271.6-FN La Victoria
Hermosillo, Sonora, Mexico
Call Bill Jarman in the US at
(520) 281-7388
Call Jose Munoz in Mexico at
011-52 (662) 280-0121



*Send address changes to: Canyon Communications, 1630 S. Stapley Dr., Suite 117, Mesa, AZ 85204 or
jb@canyoncomm.com*



2850 S. PEART RD.
CASA GRANDE, AZ 85222