

# 2019

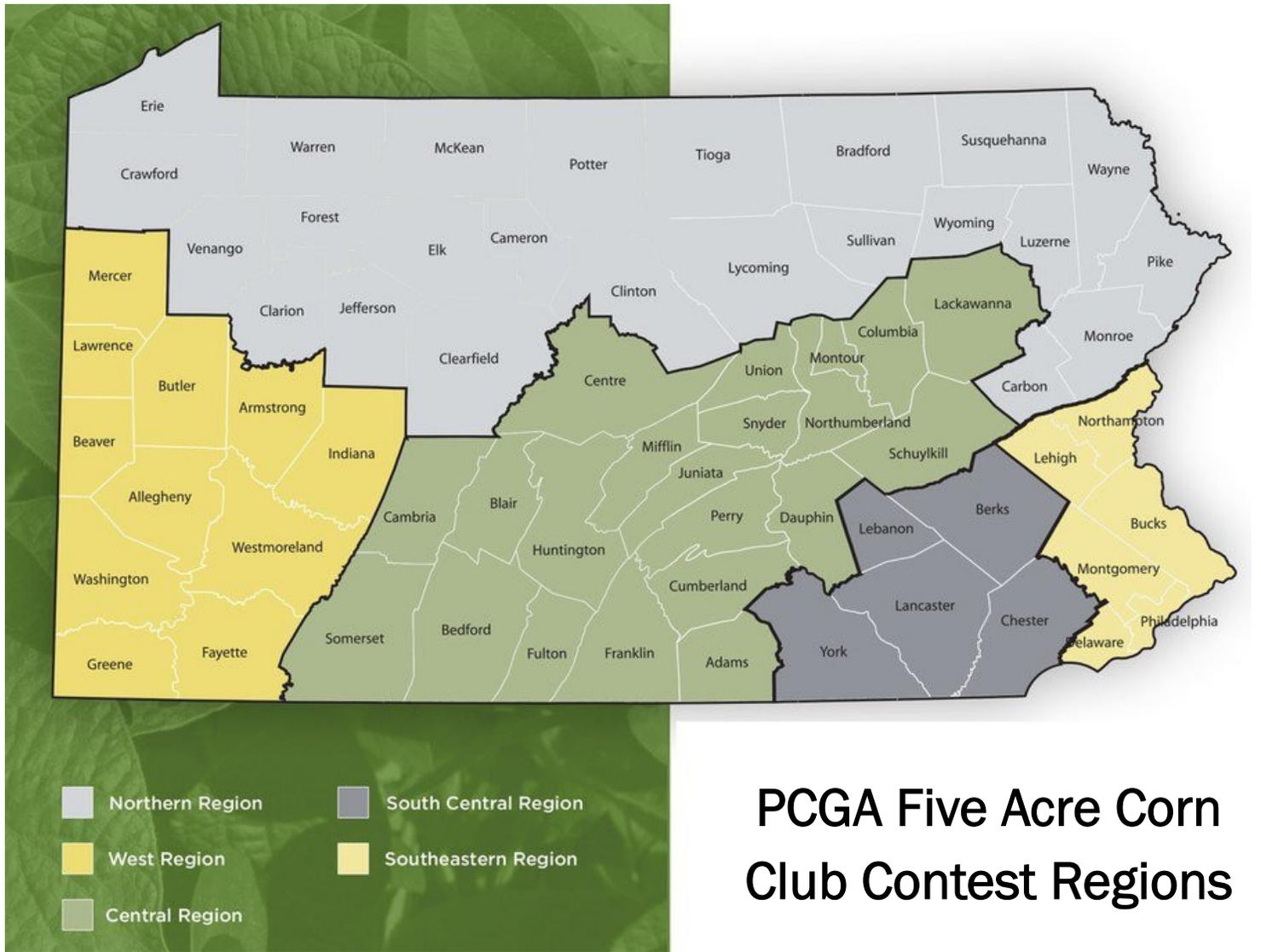
## 5-ACRE CORN CLUB CONTEST REPORT

*An important part of  
Pennsylvania's corn  
production since 1965*

### 2019 Major Sponsors



**PennState Extension**



Thanks to your membership and contributions, PCGA & NCGA were able represent Corn Growers' interests in the following areas in 2019:

- Grain Bonding
- Trade
- Ethanol
- Transportation
- Sustainable Corn Production Methods
- Commodity Pricing Issues
- End Use Products
- Farm Bill
- Soil Health and Sustainability



**Thank You!**

# PA Corn Growers Association

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*A Reflection from Eric Rosenbaum—Executive Director, Pennsylvania Corn Growers Association*

Welcome to the PA Corn Grower's Association's 2019 Pennsylvania Five Acre Corn Club Report! The Contest is PA's premier yield contest, providing valuable insight into the productivity and stewardship of Pennsylvania's corn growers. What a year it has been—the top 3 winners in the state all averaged over 300 bushels! 5-acre corn contest participants are the best and brightest in the state. These farms are continuously improving production practices and adopting new technologies to produce higher yields with lower per unit inputs and lower environmental risks. Agricultural technology, advanced genetics, plant health pesticide products, soil health practices and 4R nutrient stewardship practices continue to drive the intensification of crop management on our participants' farms. This contest raises up those efforts and showcases the fruits of that labor. Thank you to all the 2019 participants.

New to PCGA in 2019 was our Sustainable Corn Education Fund, sponsored by the Environmental Defense Fund (EDF). This partnership with EDF resulted in six members receiving reimbursement for attending the 2020 National No-Till Conference. EDF also sponsored our Precision Ag focused Annual Meeting, held at Lancaster Seed Sales on August 21. Thank you EDF for your continued support of our members!

PA Corn Growers Association is ever thankful for the work and dedication of our board of directors. This year saw many changes to PCGA, including new bylaws and increased outreach into the agricultural community. Thanks to our executive board — Elizabeth Hinkel, Matt Keller and Russell McLucas for the leadership they provide, and to Martin Krone, Andrew Kimmel, Jeff Sherman, Rich Crone, Dick Cole, Jay Stauffer, Greg Roth, Andrew Frankenfield and Jeff Graybill, for the service they provide to the organization.

This report, and contest, could not be possible without the many people dedicating countless hours behind the scene. A special thank you to Martin Krone for organizing and leading the contest this year, to Andrew Frankenfield and Jeff Graybill for their tireless support, and finally to all our harvest supervisors for the time they volunteer to make this event a reality!

Respectfully Submitted,

*Eric Rosenbaum*

Executive Director



# Member Highlight—Karl Dirks, Wolgemuth Farview Farms

## National Recognition for Nutrient Stewardship

“We adopt pretty quickly,” was Karl Dirks’ response when asked about the integration of technology, conservation, and nutrient stewardship on his farm at the 2020 National No-Tillage Conference in St. Louis, MO. Dirks was one of three farmers in the nation selected for the **2020 Responsible Nutrient Management Practitioners Award**, an annual award program sponsored by AgroLiquid and No-Till Farmer. The program recognizes no-till farms that go above and beyond to responsibly implement applied fertility programs and nutrient management practices to increase environmental, economic and social sustainability.

Karl is the manager of Wolgemuth Farview Farms, a hog and grain operation in Mt. Joy, Lancaster County as well as the owner of Lancaster Seed Sales. The farm successfully raises high yielding crops while meeting the requirements of their CAFO permit and Act 38 Nutrient Management Plan. “I’m spending as much time making sure I’m not over-applying nutrients as I am making sure that I’m applying enough nutrients,” Karl stated, when asked how the farm balances production goals with environmental concerns. The farm uses a number of 4R Nutrient Stewardship practices to achieve these goals including: regular soil testing and manure testing, continuous no-till, cover crops, split applications of nitrogen fertilizer, cover crops, split applications of nitrogen fertilizer, plant analysis, micronutrient fertility, variable rate seeding and precision planter attachments. In recent years Karl has used Climate Fieldview to “turn the whole farm into a test plot,” utilizing the precision ag platform to manage numerous strip trials.

Karl is no stranger to the PCGA 5-Acre Corn Contest—finishing 2nd in the state competition in each of the past two years.



**PCGA CONGRATULATES KARL DIRKS**

**2020 RESPONSIBLE NUTRIENT MANAGEMENT PRACTITIONERS AWARDEE**

**Reducing Applied Nutrients with No-Till, Cover Crops**  
Located in the Chesapeake Bay watershed, Wolgemuth Farview Farms practices no-till with cover crops to reduce nutrient runoff into this delicate tidal basin.

By Laura Handke, Contributing Writer

Conservation agriculture is a way of life for Karl Dirks of Wolgemuth Farview Farms, which is nestled midway between Hershey and Lancaster, in Mount Joy, Pa. For the past 15 years, no-till practices have been an integral component in the farm's operation. "When no-till started to catch on in our area, we adopted it pretty quickly. We learned about it from a couple of neighbors, got invited to a few conferences and got better at implementing it," he says.

Farmed under stringent regulations in the Chesapeake Bay watershed, Farview Farms is ahead of new compliance requirements with the help of no-till practices. "We started no-till farming for the reduction in work, primarily," Dirks says. "But it didn't take very long before our yields increased and we started to see the moisture and erosion savings that came with it."

Today, the operation continues to practice the 4Rs of responsible nutrient management and has reduced the amount of high salt commodity fertilizers used in its farming practice while continuing to increase yields.

**Managing 'N'**

Farview Farms out-performed the average by producing 240 bushels of corn, 85 and 80 bushels of soybeans. The 7 bushels per acre, respectively, was achieved despite the fact that the farms haven't cover used a starter package.

re-application of nutrients, including an as-needed sidedress to 30-60 gallons per acre. Monitoring and through split applications, the sulfur is added only as needed.

41 pounds of actual N, followed by 45 lb of the crop's N from a knee-high based on credits

taken from the legume cover crop and manure application for the field.

For the small grains that are grown before double-cropped beans, 30 pounds of N per acre is used, only if needed, as indicated by the soil tests. Spring N is split-applied, with an early spring rate of 30 pounds per acre and a late spring application of 30 pounds per acre.

**Plant and Soil Tests**

To monitor macro- and micronutrient availability, Dirks pulls both plant tissue and soil samples. Plant analysis has shown an increased need for magnesium, sulfur, boron and copper in small grains as well as an increased demand for magnesium in corn acres.

"I'm spending as much time making sure that I'm not over-applying nutrients as I am making sure that I'm applying enough nutrients," says Dirks. "In 2019, we pulled soil samples immediately after harvest to see if we got full use of nitrogen from the soil. We did, which is ideal — we have really honed in on our base fertilizer needs for a crop."

Typically, Dirks samples for a half of all farmed acres annually to direct top manure application and uses grid sampling to determine micronutrient availability in fields with a high level of variability. Dirks says that soil testing has improved profit returns.

"Soil testing has increased our yields through better potassium (K) and secondary nutrient management," he says. "It has also allowed us to increase our management strategy in each field."

Manure from Dirks' hog confinement operation is utilized to reduce the amount of

K applied and currently replaces the need for commercial phosphorus (P). For the corn, potassium is used to supplement the manure applications on an as-needed basis that is determined by soil testing.

"Some of our fields have a higher phosphorus level, so we pull soil samples on those fields every year to find the balance and make sure that we are maximizing yield potential," Dirks says. "Since we started closely monitoring our phosphorus levels, we have consistently decreased our phosphorus rates and increased our yields."

**Cover Crop Benefits**

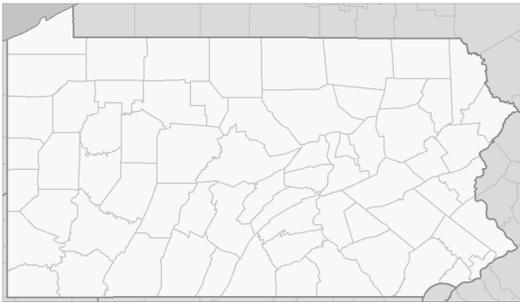
Cover crops became a staple in Dirks' management practices 4 years into adopting no-till farming. Today, he says the operation utilizes cover crops on nearly 100% of farmed acres. The cover crops, typically small grains or a multispecies mix, help to cycle nutrients and hold topsoil in highly erodible fields.

"We farm on 6 inches of topsoil that covers limestone, and since we began using cover crops, we've noticed that our water holding capacity and infiltration have both increased," Dirks says.

Looking forward, Dirks says that the integration of responsible nutrient management in his area and continues to share the message through his work as an advisor on the Pennsylvania 4R Nutrient Stewardship Association board.

RNM/January 8, 2020

**“Since we started closely monitoring we have continually decreased our phosphorus levels and increased our yields...”**  
— Karl Dirks



# 2019 STATE CHAMPIONS

# 1

## Darren Grumbine—Lebanon

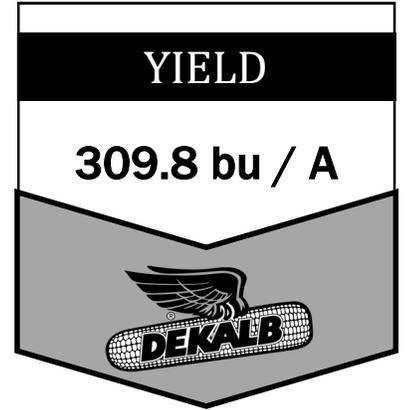
Variety: Dekalb DKC62-53

Planting Date: 4/19/19

Planting Rate: 38,000

Total Nitrogen Fertilizer: 150 lbs / A

Tillage Practice: No Till



# 2

## Karl Dirks—Mt. Joy

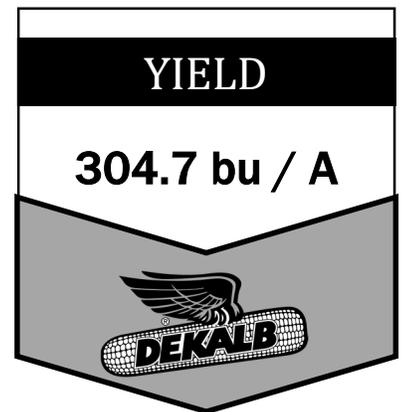
Variety: Dekalb—DKC60-88

Planting Date: 4/30/19

Planting Rate: 38,000

Total Nitrogen Fertilizer: 300 lbs / A

Tillage Practice: No Till



# 3

## Kristen Grumbine—Lebanon

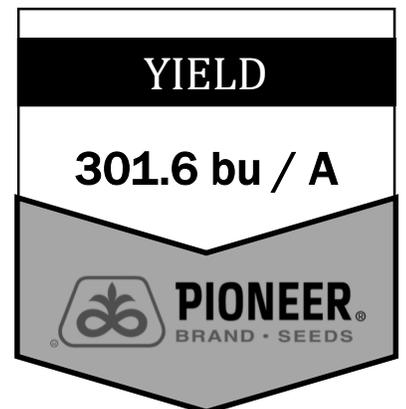
Variety: Pioneer—P1847AML

Planting Date: 4/18/19

Planting Rate: 37,000

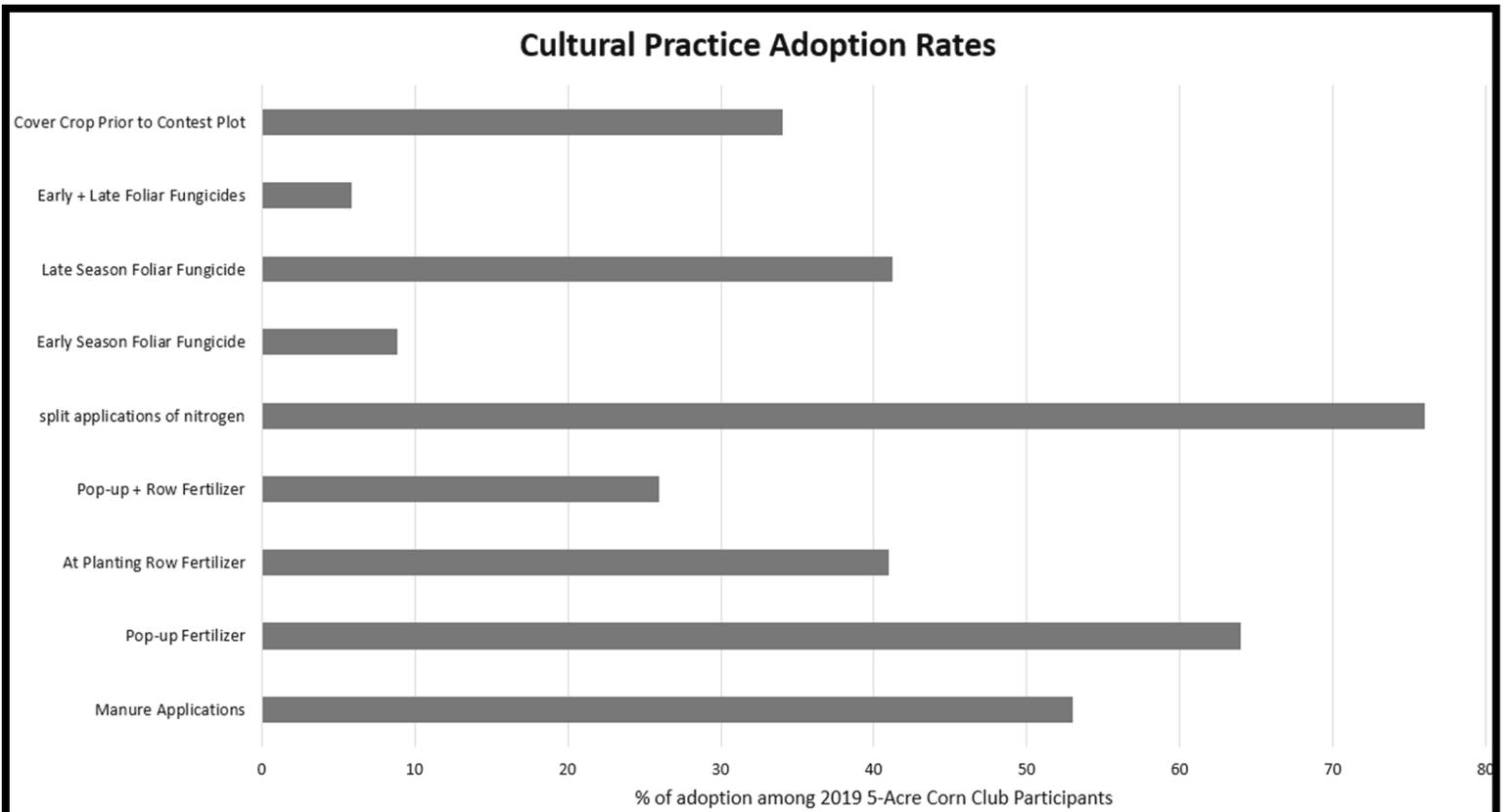
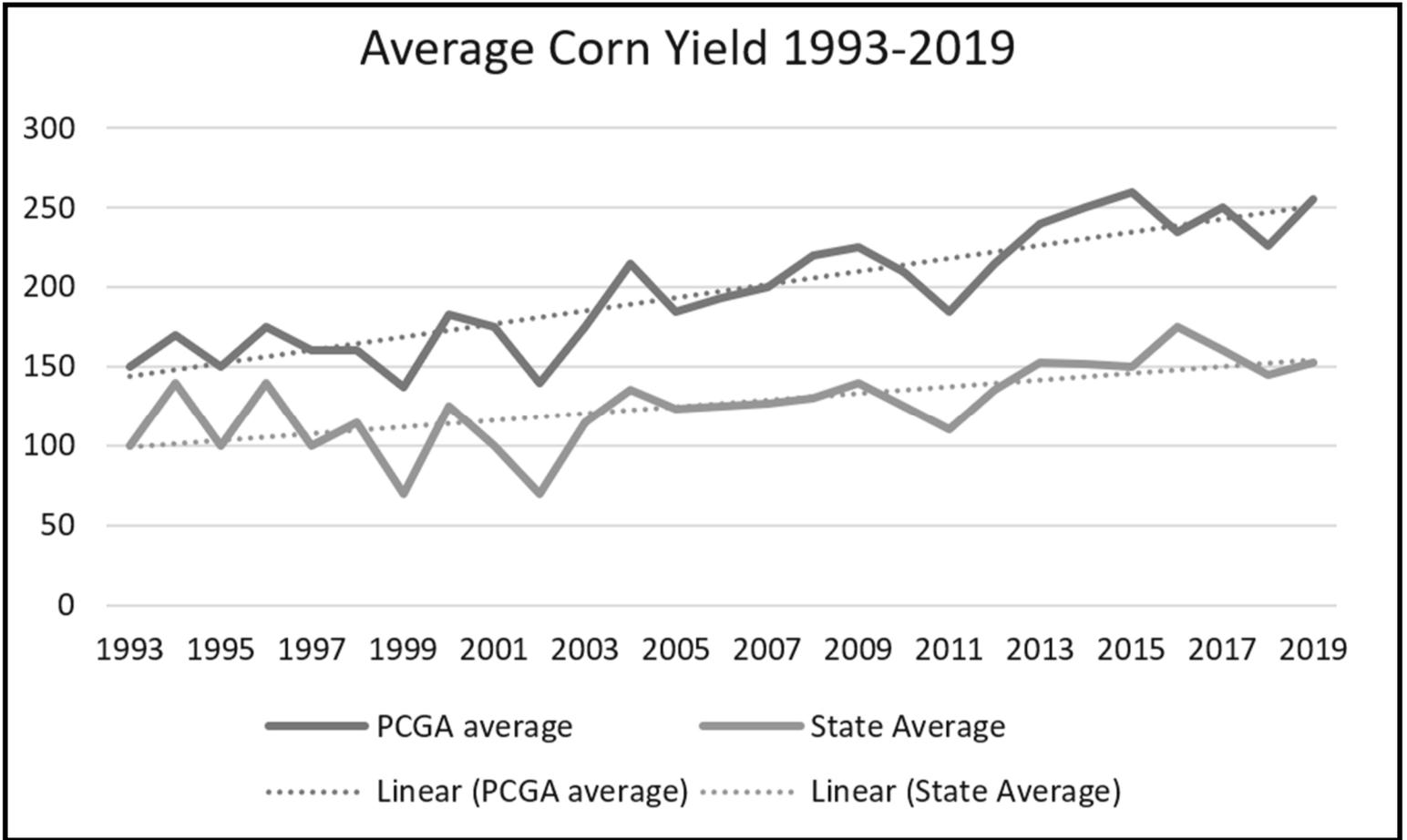
Total Nitrogen Fertilizer: 150 lbs / A

Tillage Practice: No Till



# By the Numbers

Trends, Facts and Figures about the 5-Acre Corn Club Contest



## TOP PRODUCER

**Raymond G Martin**

*Wellsboro*

199.7 bu / A



## Northern Region

Producer Name	County	Variety	Yield (bu/A)
Raymond G Martin	Tioga	Pioneer P9188R	218.3
Derek Swartfager	Clarion	Local Seed Co	211.9
Nelson A Welles III	Bradford	Growmark FS 5525	175.1

### Did you know...

PCGA's Membership Incentive Program provides one free bag of corn for each three-year membership?

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join PCGA  
today?

## Central Region

Producer Name	County	Variety	Yield (bu/A)
Carl T Shaffer	Columbia	Dekalb DKC62-08RIB	266.9
Leslie Bowman	Franklin	Dekalb DKC60-88RIB	258.5
Richard Crone	Northumberland	Channel 215-60TreRIB	256.4
Leon C Wertz	Northumberland	Pioneer P1283AM	244.1
Danny Rice	Perry	Channel 207-27VT2	220.1
Burnell Weaver	Schuylkill	Seed Consultants	191.5

## TOP PRODUCER

**Carl T Shaffer**

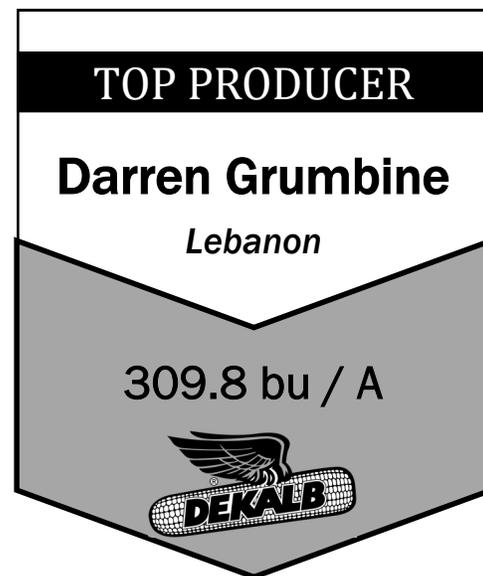
*Mifflinville*

266.9 bu / A



# Southcentral Region

Producer Name	County	Variety	Yield (bu/A)
Darren Grumbine	Lebanon	Dekalb DKC62-53RIB	309.8
Karl Dirks	Lancaster	Dekalb DKC60-88	304.8
Kristen Grumbine	Lebanon	Pioneer P1847AML	301.6
Glenn Krall	Lebanon	Pioneer P1415Q	293.1
Glen S Zimmerman	Lebanon	Pioneer P1415Q	291.3
Elvin Reiff	Lancaster	Huber H6663RCSS	289.1
Michael Shearer	Lancaster	Pioneer P1197AMXT	288.8
Pat Buser	York	Pioneer P0843AM	271.9
Brian Kreider	Lebanon	Pioneer P1283AM	280.3
Robert Buser	York	Pioneer P1283AM	271.9
John Groff	Lancaster	Hubner H4744RC2P	270.0
Merle Stoltzfus	Lancaster	Hubner H4390RC2P	269.9
Samuel Conley	Lancaster	Hubner H08G394	264.7
Doris Stoltzfus	Lancaster	Hubner H12G624	256.0
Linda Krall	Lebanon	Pioneer P057AM	254.3
Ethan Buser	York	Pioneer P1197AMXT	231.5



**TOP PRODUCER**

**Brian Fulmer**  
*Nazareth*

265.4 bu / A



# Southeastern Region

Producer Name	County	Variety	Yield (bu/A)
Brian Fulmer	Northampton	Hubner H6663RCSS	265.4
Shane Fulmer	Northampton	Hubner H6755RCSS	250.7
John Frederick	Bucks	Growmark FS	244.0
Timothy Stewart	Bucks	Dekalb	238.1
Robert Rook	Bucks	Pioneer P1847	193.0



**NATIONAL  
CORN GROWERS  
ASSOCIATION**

Congratulations to all Pennsylvania participants in NCGA's  
***National Corn Yield Contest.***

For a list of all participants, visit:

[www.ncga.com/for-farmers/national-corn-yield-contest](http://www.ncga.com/for-farmers/national-corn-yield-contest)

# Western Region

Producer Name	County	Variety	Yield (bu/A)
Robert Dorazio	Fayette	Pioneer P1197	290.4
Michael Reskovac	Fayette	Pioneer P1197	287.1
Richard Burd	Fayette	Pioneer P1197	214.8
Jeremy Dorazio	Fayette	Pioneer P0242AMXT	201.5

**TOP PRODUCER**

**Robert Dorazio**  
*Lake Lynn*

290.4 bu / A





## PCGA Thanks 2019 Harvest Supervisors for their Time and Efforts!

- Alyssa Collins, PSU Extension Specialist
- Anna Busch, PSU Extension Educator
- Brittany Clark, PSU Extension Educator
- Casey Guindon, PSU Extension Educator
- Del Voight, PSU Extension Educator
- Duane Miller, PSU Extension Educator
- Heidi Reed, PSU Extension Educator
- Hope Reed, PSU Extension Educator
- Jeff Graybill, PSU Extension Educator
- Justin Brackenrich, PSU Extension Educator
- Liz Bosack, PSU Extension Educator
- Michael Fournier, PSU Extension Educator, retired
- Nick Hebrock, Crop Consultant
- William F Gallagher, PSU Extension Educator, re-tired



## Connect with us!



**Eric Rosenbaum, Executive Director**



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**[www.pacorngrowers.org](http://www.pacorngrowers.org)**



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# FACTS AND FIGURES AROUND THE 2019 CONTEST

*Eric Rosenbaum—Executive Director, PA Corn Growers Association*

This year **34 members competed** in the 5-acre corn club contest and averaged 255.5 bushels per acre with a final stand of 32,630 plants per acre. The **top yield this year was 309.8 bushels** per acre. Yields were up significantly from last year's average of 291.6 bushels per acre but final populations were relatively unchanged (32,433). Our yields this year were likely influenced by **adequate soil moisture and increased solar radiation** this summer.

In our cultural practices summary, the average planting depth was 2.0 inches deep with an average seed drop of 34,233 seeds per acre. Most fields in the club followed soybeans (61%), while 21% followed corn. **79% of the contest plots were planted using no-till** and 76% of the fields were sidedressed with N that averaged 120 pounds N per acre. **Starter fertilizers were used by all club members**: 20 of the 31 used a pop-up program that varied from 2 to 6 gallons per acre, 14 used a higher rate row fertilizer program, and 9 used a combination of pop-up and higher rate row fertilizer, which was mostly liquid N based fertilizer. **35% of contest plots were planted into a cover crop**. About 24% of the members used an in row insecticide this year, a reduction from the 45% of participants using in-row insecticide in 2018. 88% of the corn club fields received a post-emergent herbicide. The trend of post emergence tank-mixes is increasing, with 50% of plots received two or more herbicide modes of action in the post application. Reported disease pressure was much lighter than 2018 and 50% of the club fields were treated with a fungicide, either at V6, pre-tassel, green silk, brown silk. Almost all fungicide products applied contained at least two fungicide modes of action.

**Congratulations again to all the producers who participated in this year's program.** Many thanks are due to the extension educators and crop consultants who helped collect the yield and cultural information for the club. Also, a special thanks is due to Martin Krone and Jeff Graybill for their diligent work in pulling this report together.

