

2009 Agriscience Fair Medal Rankings (sorted by category, division and state)

Biochemistry/Food Science/Microbiology

Division I

AR *Alpena HS FFA*

The Bacteria Factor Phase I

Medal: **G** Savannah Colbert

AZ *Highland HS FFA*

Bacteria in Water Bottle

Medal: **B** Elizabeth Nguyen

CA *Elk Grove HS FFA*

How Efficient is Compost Starter?

Medal: **G** Colin Oair

DE *Milford HS FFA*

Which Board is Better?

Medal: **B** Casidhe Bruns

FL *Redland Middle School FFA*

What effect does time spent washing your hands have on hand cleanliness?

Medal: **S** Jared Worthley

GA *Northeast Middle School*

Scoop the Poop

Medal: **S** Kaylee Tillery

IA *South Obrien HS FFA*

trans-Resveratrol Existence in Vaccinium Macrocarpon Skins with Antibiotic Evidence of its pulp on multiple species of

Medal: **G** Erin Brassler

IL *Taylorville HS FFA*

"Does Carcass Hanging Time Improve Meat Tenderness"

Medal: **S** Rebecca Livingston

LA *Fontainebleau Junior FFA*

Chevon For Dinner

Medal: **B** Erica Young

MN *Perham HS FFA*

The Role of the Urokinase Plasminogen Activator and Lysophosphatic Acid in Lung Cancer Tumor Progression

Medal: **G** Candace Rastedt

NM *Moriarty HS-Ffa*

A Piece to the DNA Puzzle

Medal: **G** Kolene Winn

NY *South Jefferson FFA*

Which Anti-Bacterial Soap Kills Best?

Medal: **B** Alisha Fregoe

OH *Johnstown-Monroe HS-ffa*

The Battle of the Proteins: Whey vs. Soy

Medal: **G** Elisa Higgins

OK *Waukomis HS FFA*

How Do Glutens Effect Baking Quality

Medal: **S** Garrett Sharp

PA *Greenwood HS FFA*

The Effect of Wet Ageing on Meat Tenderness

Medal: **S** Nicholas Fried

TN *Clarkrange HS FFA*

O Say Can You "C"

Medal: **S** Kelsey Matthews

TX *Florence FFA*

The Effects of Time and Temperature on Hard Boiled Eggs

Medal: **S** Cody Earp

UT *Lehi HS FFA*

How does color of food effect taste?

Medal: **B** Tyler Goodman

WV *Moorefield Middle School FFA*

Fruit Powered

Medal: **S** Taylor Zuber

Biochemistry/Food Science/Microbiology

Division II

AR *Alpena HS FFA*

Sweet by Nature: A Study of the Effects of Natural and Artificial Sweeteners

Medal: **S** Cassandra Green

AZ *Peoria HS FFA*

My Sweet Apple

Medal: **S** Emily Wolfe

CA *Elk Grove HS FFA*

What's the Solution?

Medal: **S** Jacob Carlson

FL *Okeechobee Brahman HS FFA*

From Grass to Gas: Using Fluid from the Rumen of a Bovine and Commonly Grown Forages to Produce Biofuel

Medal: **B** Kelsey Burnham

IL *Taylorville HS FFA*

Natural vs. Traditional

Medal: **S** Jarred Winans

KY *Western Hills HS FFA*

Fresh Out of the Bag

Medal: **B** Ali Higgs

MA *Cape Cod Rg Tch HS FFA*

Would You Like A Bag For That?

Medal: **B** Zach Riley

MN *Westbrook-Walnut Grove FFA*

Plastic Leaching: The effect of chemicals in plastic on bacterial growth

Medal: **G** Samantha Baker

MO *Tuscumbia FFA*

A Comparison Study of coliform and E. coli Counts in Various Karst Water Systems Associated with Agriculture Usage

Medal: **G** Dillon Barnfield

MT *Cascade HS FFA*

Determining the Origin of a Volcanic Ash Layer in a Creek Bank

Medal: **G** Karissa Floerchinger

NJ *Biotechnology HS FFA*

Yeast Fermentation Variances with Artificial Sugar Food Source

Medal: **G** Jeff Neyhart

NM *Alamogordo HS-FFA*

Which is Better?

Medal: **B** Chelsea Dennett

NY *Uniondale FFA*

A Novel Approach Combining MFC and MEC Technology

Medal: **G** Jordan Boucicaut

OH *Pettisville HS FFA*

The Effects of Gibberellic Acid on Sunflower Oil Content

Medal: **S** Ashley Eicher

OK *Burlington HS-Ffa*

Is Mass Medication of High-Risk Cattle Cost Effective?

Medal: **S** Lacey Newlin

SD *Florence HS FFA*

Calcium Content in Milk: What Variety Has The Most?

Medal: **B** Brandy Heathcote

TN *Daniel Boone HS FFA*

Wool, Hair, What's Your Face?

Medal: **S** David Doan

TX *Slaton HS FFA*

POEA in the Environment, Year III: Toxic Effects of POEA Surfactant on and Identification of Bacteria on Eisenia foetida and

Medal: **G** Jayton Rainey

UT *Lehi HS FFA*

The Affects of Paylean on Pigs' Meat

Medal: **B** Natasha Morgan

VA *Central HS FFA*

How do ionophores change rumen microbiology?

Medal: **S** Aaron Heishman

WI *Big Foot HS FFA*

Impact of Genetic Alteration on Edible Film Antimicrobial Agents

Medal: **G** Alicia Hodnik

WY Casper FFAa Natrona Co HS

Peppers for the Common Cold

Medal: **S** Emily Balfour

Biochemistry/Food Science/Microbiology

Division III

DE *Smyrna Middle FFA*

I Scream for Ice Cream

Medal: **S** Katie Reed Jennifer Gray

GA *Perry Middle-Ffa*

Where's the Beef? A Comparison of the Fat Content of Grass-fed Beef to Other Types of Ground Beef

Medal: **S** Samantha Strickland Tal Lineberger

IA *Central Lee FFA*

Is it Really All Flushed Away?

Medal: **B** Carmen Ridgway Caylie Hawkins

NC *Person HS FFA*

Protein: Is It There or Not? The Effects of Storage on Animal Feed Protein Levels

Medal: **S** Carson Lunsford Kristen Duncan

NJ *Biotechnology HS FFA*

The Effects of Various Bacteria on the Defense Mechanisms of Pure Yellow Pansies

Medal: **G** Samantha Giffen Shelly Grinshpun

TX *East Central FFA*

Got "C" -- How Much Vitamin C Does Your Orange Have In It?

Medal: **G** Christi Schick Amber Kerns

UT *Lehi HS FFA*

The Effect of Packaging on Food Spoilage and Preservation

Medal: **B** Taylir Hutchings Kelton Sorenson

Biochemistry/Food Science/Microbiology

Division IV

CA *Littlerock HS FFA*

The Effects of Nitrates on Meat Eye Appeal and Palatability

Medal: **G** Jiggs Briggs Jessica Briggs

DE *Smyrna High School FFA*

Effectiveness of Mouthwashes

Medal: **S** Lauren Nickerson Rebecca Urian

FL *Turner Tech Arts-Miami Sr FFA*

From Waste to Fuel: The Production of Methane Gas

Medal: **B** Bria Cowart Ruby Robinson

GA *Tift Co. FFA*

The Detection of Genetically Modified Foods

Medal: **G** Alana Schofill Dustin Eaton

IL *Taylorville HS FFA*

Pork Fat: Friend or Foe

Medal: **S** Alexander Ostermeier Philip Wright

IN *Lebanon*

Digestion and Absorption of Lipids

Medal: **B** Susan Thatcher Zach Edwards

KY *Union Co HS FFA*

Biofuels; Fuel from Food

Medal: **B** Michael Waldington Chelsea Fromm

MN *Ag & Food Sci Academy FFA*

Bacteria in the Kitchen

Medal: **S** Catie Ludden Evana Kvasnik

NE *Lourdes Central Catholic*

A Comparison of Sow Parity and It's Effect on Escherichia Colibacillosis (E. Coli)

Medal: **G** Rachael Arkfeld Patrick Arkfeld

NJ *Biotechnology HS FFA*

Megagenomic Analysis of Unknown Bacterial DNA

Medal: **G** Domenic Desocio Jennifer Nestor

NM *Alamogordo HS-FFA*

Effects of ethylene on the ripening of fruits

Medal: **B** Wrangler Yarbrough Lyle Danley

NY *Uniondale FFA*

Determining the Effects of Commercially Used Nanoparticles on Organisms and Searching for Possible Mean of

Medal: **S** Patrick Thomas Bri-Anna Peoples

OH *Smithville HS FFA*

Fresh vs. Frozen

Medal: **S** Marie Arnold Jill Hollenbaugh

PA *Conococheague FFA*

Levels of Vitamin C in Oranges

Medal: **S** Kelsey Meyers Mary Copeland

TX *Frenship HS-Ffa*

The Effects of Chixicide on the Pathogenic Growth on Poultry

Medal: **G** Ashleigh Willems Graysen Ortega

UT *Riverton HS FFA*

White Line Disease and DNA

Medal: **S** Nicole Lochhead Shelby Stauffer

WA *Sumner FFA*

Determination of OvHV-2 Shedding Amongst Adolescent Sheep

Medal: **G** Becca Humphries Kelsey Oliver

WI *Pulaski HS FFA*

Is Red Really as Sweet?

Medal: **S** Casey Resler Marley Worm

WV *Ripley HS FFA*

Would We Lye To You? An Investigation of the Saponification Process

Medal: **B** Shawna Rhodes Brittany Munday

Botany

Division I

AR *Alpena HS FFA*

Bean Burner

Medal: **S** Shane Bright

CA *Escalon HS FFA*

The Effects of pH Levels on the Formation of Legume Nodules

Medal: **G** Kyle Rose

DE *Delmar HS FFA*

Effects of Soil in Marigold Growth

Medal: **S** Dylan Lister

FL *Taylor Middle School FFA*

Does Delta Sleeving Leatherleaf Fern Affect Vase Life

Medal: **G** Brendan Register

IA *South Obrien HS FFA*

Row width and plant density of corn

Medal: **S** Austin Jurgensen

IN *Paoli HS FFA*

Evaluation of Soil Textures on Economic Performance of Yellow Dent Corn Under Adverse Moisture Conditions

Medal: **S** Jordan Cadle

MA *Essex Ag & Tech Inst FFAa Chapt*

Solution or No Solution

Medal: **B** Amanda Beucler

MN *GFW Pioneer Express FFA*

Is the health of soil affected by its use and management?

Medal: **G** Heidie Sloom

MO *Chillicothe FFA*

The Effect of Row Width on Soybean Yield

Medal: **B** Daniel Nowland

NM *Santa Rosa HS-FFA*

Alfalfa Seed Germination

Medal: **B** Felicia Moncayo

NY *Uniondale FFA*

The Effect of the Arbuscular Mycorrhizae Fungi on the Elecitation on

Medal: **G** Manuel Flores

OH *Benjamin Logan HS FFA*

A Study of Nannochloropsis Salina

Medal: **G** Kathleen Seeley

PA *Danville HS FFA*

Got Mulch

Medal: **S** Brianna Wells

PR *S U Pajuil FFA*

The Effect of Calotrophi procera's latex as an organic repelent for poultry

Medal: **G** Miguel Colon

TN *Clarkrange HS FFA*

The Effects of Soil Sterilization on Seed Germination

Medal: **B** Justin Viles

TX *Cooper HS-Ffa*

Are You Thirsty?

Medal: **G** Jayton Jones

UT *Bear River HS FFA*

Examining the Speed of Germination of Popular Wheat Varieties

Medal: **S** Whyatt Garn

VA *Beverley Manor Middle Sch FFA*

Cornucopia

Medal: **S** Abigail Cromer

WI *Spencer HS FFA*

How Can Plant Growth Regulators Affect Fast Plants?

Medal: **S** Stacey Springob

WV *Moorefield Middle School FFA*

To Sprout or Not to Sprout

Medal: **S** Michael Thomas

WY *Casper FFAa Natrona Co HS*

Get To The Root Of It

Medal: **S** Kailey Richner

Botany

Division II

AR *Alpena HS FFA*

Smelly Business Phase III

Medal: **B** Megan Ross

CA *Elk Grove HS FFA*

Does Late Day Hay Really Pay?

Medal: **G** Tom Hardesty

CO *Dove Creek FFA Chapter*

Biodiesel from Sunflowers: Phase II - An Analysis of Soil Moisture Content and Sunflower Oil Content

Medal: **G** Jordan Lestina

CT *Lyman Hall FFA*

CowPots, Are They For You?

Medal: **S** Alexandria O'Neill

DE *Woodbridge HS FFA*

Habitats: Weathering the Weather

Medal: **S** Lindsey Cook

FL *Wildwood HS Sr FFA*

Recycled Lettuce

Medal: **S** Charisty Lee

GA *Sonoraville FFA*

"Propagating Rosemary"

Medal: **G** Amber Kay

IA *Central Lee FFA*

The Effects of European Corn Borer on BT Corn vs. NonBT Corn

Medal: **S** Luke Boeck

IL *Cisne HS-Ffa*

Does Size Matter?

Medal: **S** Matthew Byars

IN *Lebanon*

Marker-Trait Association for Maize

Medal: **G** Andy Dardini

MD *Boonsboro HS FFA*

Root Race

Medal: **B** Ashley Lowery

MN *Ag & Food Sci Academy FFA*

Producing Optimal Forage Grass Nutrition in a Controlled Environment

Medal: **S** Kelly Froehlich

MT *Big Sky High Sch Missoula FFA*

Effects of Leaf Extracts from *Centaurea maculosa* on Grass Seeds Native to Montana and Eurasia

Medal: **G** Sara Denitto

NC *J F Webb HS FFA*

How Green Can You Be?

Medal: **S** Emily Phillips

ND *Maddock A.s. Gibbens FFA*

The Comparative Physiology of *Zea mays* var. Japonica

Medal: **B** Preston Gilderhus

NJ *Salem Co Vtc-Ffa*

How do Air Fresheners Affect the Growth and Quality of House Plants?

Medal: **G** Theresa Krawiec

NM *Tularosa HS-Ffa*

How Does the Amount of Sunlight Effect the Growth of Jalapeno Peppers?

Medal: **S** Shonda Parsons

NY *South Jefferson FFA*

Effects of Nutrient Film Technique vs. Raft Hydroponic Systems

Medal: **B** Summer Greenwood

OH *Liberty Benton HS FFA*

Don't "Cell" the farm! (RF radiation adversely impacts wheat yield and crop quality.)

Medal: **G** Alannah Abrams

OK *Atoka HS FFA*

Can Lycopene Prevent Skin Damage?

Medal: **G** Taylor Runyan

OR *Tillamook HS FFA*

The feasibility of using methane digested pulpe pellets with grass seed for vegetative recovery following forrest fire

Medal: **B** Brad Springs

PA *Juniata FFAa Chapter*

The Effects of Chemical, Compost, and Organic Fertilizers on Tomato Plants

Medal: **S** Danielle Gray

SD *Bowdle HS FFA*

Wheat Yields

Medal: **B** Chelley Eisenbeisz

TN *Dekalb Co HS FFA*

Soil Drainage and Water Holding Capacity

Medal: **B** Trent Vickers

TX *Madison HS-Ffa*

Under the Rainbow Phase 2: How Different Colored Light Affects Vegetable Plants

Medal: **G** Katharine Beason

UT *Lehi HS FFA*

Determine the affects Tahitian Noni Juice has on Crop Yield

Medal: **S** Jakob Jones

WI *Black River Falls HS FFA*

Keepin' From Freezin'

Medal: **S** Zachary Markhardt

WV *Ripley HS FFA*

Forages and Ewe_A study of the effects of grazing on soil productivity

Medal: **B** Landon Snyder

WY *Casper FFAa Natrona Co HS*

Botanical Impacts of Road Deicing: NaCl Toxicity Test with Lettuce Seeds

Medal: **S** Stormie Russell

Botany

Division III

CA Escalon HS FFA

Precision Site Soil Sampling Versus Random Soil Sampling: A Comparison of Accuracy and Cost

Medal: G Hannah Beeler Arissa Chunn

DE Smyrna Middle FFA

The Tomato Racers

Medal: S Jennifer Savin Trista Fowler

FL Brooksville Sr. FFA

Do Rings Really Count?

Medal: B Casey Stewart Anna Gray

GA Hilsman Middle FFA

Does pH Matter?

Medal: B Katie Siemion Haley Davis

KY Jessamine Co FFA

The Sound of Music

Medal: B Krystal Rigney Briana Hardesty

MN Benson Sr HS FFA

Improving Seed Corn Germination

Medal: B Nicole Thompson Jennifer Hippe

NC West Johnston FFAa Chapter

Aeroponics: A New Age in Horticulture

Medal: G Morgan Honeycutt Carmen Honeycutt

NE Syracuse Dunbar-Avoca HS FFA

The Effect of Being Genetically Modified on Corn Growth

Medal: G Levi Ropers Luke Pietzyk

NJ Biotechnology HS FFA

Magnetite Magic - the effects of different magnetite concentrations in soil on the growth of radishes

Medal: S Deborah Bakshiyev Alexa Avitto

NM Alamogordo HS-FFA

Does Color Measure Up?

Medal: S Shawna Mcnatt Danielle Mendoza

NY Uniondale FFA

The Effect on "Genus Brassica" using Traditional and Non-Traditional Plant Growth Regulators

Medal: S Iliana Zalaya-Valles Katherine Depaz

OK Moore FFA

Flower Survival: A Life Voyage

Medal: S Katlynn Craft Savannah Melton

TX Krum HS FFA

Which Type of Mulch Holds the Most Moisture Out of a Variety of Mulches

Medal: B Amy Wolf Payton Vardell

Division III

UT Lehi HS FFA

Determining if SoilMoist will reduce the amount you water a greenhouse

Medal: S Emily Webb Kimberly Hanks

VA Carroll Co Intermediate Sch001

What is the magic number?

Medal: G Ashley Light Suzanne Leonard

WA Sumner FFA

Dairy Struvite as a Phosphorous Source in Turf Grass Production

Medal: G Chase Barrus Megan Cihak

Botany

Division IV

CA *Galt Uhs FFA*

The effects of sucrose dips, light and fertilizer on root regeneration in pre-transplant processing tomatoes

Medal: **G** Isaac Valencia Dominic Stellato

FL *Wildwood HS Sr FFA*

Cloning in the Classroom

Medal: **G** Mikaela Duffy Garth Edwards

GA *Lagrange HS FFA*

Say it isn't Soil

Medal: **G** Laura Daniel Katherine Throne

IL *Taylorville HS FFA*

Carnation Life

Medal: **S** Christy Levault Kyle Hadden

IN *Tri County HS FFA*

Which H2O will Make it Grow?

Medal: **S** Rick Douglas Patrick Klaus

KY *Jessamine Co FFA*

The Effect of Different Planting Depths on The Rate of Germination

Medal: **S** Taylor Husson Alex Tingle

MO *Walnut Grove HS FFA*

The effect of Container Color and Tarp Coverage on Moisture Content in Fescue Seed

Medal: **S** Kaleb Killingsworth Josh Buckner

NC *West Johnston FFAa Chapter*

"Lettuce" Stop Algae

Medal: **B** Amber Butler Jessica Stanley

NJ *Cape May Co Tech School FFA*

Hydroponics versus Soil: Which produces plant roots faster?

Medal: **S** Andi Ehrhardt Kaity Dunlevy

NM *Tularosa HS-Ffa*

Hydroponics Vs. Soil in Plant Production

Medal: **S** Shanley Smotherman Shayella Smotherman

NY *Uniondale FFA*

A Remedy With No Side Effects. Reversing Medicago Sativa Autotoxicity Through The Use of Plant Growth Regulators While

Medal: **G** Jenny Rodriguez Kenneth Callier

OH *Federal Hocking HS FFA*

How do fertilizer strengths effect radish growth?

Medal: **S** Erin Moore Paige Dunfee

OR *Tillamook HS FFA*

The Effects of Catastrophic Forest Fire on the Hydrologic Properties of Mazama Ash Soils in Southern Oregon

Medal: **G** Nathan Whalen Rachel Porter

TN *Grundy Co HS FFA*

Hydroponics vs. Soil

Medal: **B** Christa Meeks Joseph Layman

TX *Crowley FFA*

Fresh is the Best: A Comparison of Floral Preservatives

Medal: **G** Heather Beets Brianna Grigsby

UT *Lehi HS FFA*

What Fertilizer works the most efficiently on the growth of Timothy Grass?

Medal: **S** Brad Haws Morgan Lloyd

WI *Melrose-Mindoro HS FFA*

Cryopreservation: Preserving Seeds in Liquid Nitrogen

Medal: **G** Jamie Pfaff Valerie Ponterio

WV *Ripley HS FFA*

The Effects of Seed Age on Successful Germination

Medal: **S** Megan Randolph Stephanie Gruber

Engineering

Division I

AR *Glen Rose HS FFA*

Free Power from a Pickup

Medal: **S** Levi Jones

CA *Elk Grove HS FFA*

Controlling Erosion, A Comparison of Erosion Preventions Methods

Medal: **G** Joey Clifford

FL *Kennedy FFA*

Hurricane Spoilers

Medal: **G** Abigail Ayers

GA *Franklin Co HS FFA*

Illuminating the Path to Energy Savings

Medal: **S** Malone Thomason

IA *South Obrien HS FFA*

Acetylene Synthesis

Medal: **B** Eric Magnussen

IL *Waterloo HS FFA*

Affect of Tempering, Hardening, & Annealing on the Tensile Strength of 1018 Steel

Medal: **G** Alexis Clinebell

LA *Fontainebleau FFA*

The Green Machine: A Nonpolluting, Energy Efficient Lawn Mower

Medal: **S** Wyatt Joiner

MO *Willard FFA*

Wood Gassification

Medal: **S** Scott Larson

NC *Powhatan Junior FFA*

The effect of type of wood on burning time

Medal: **B** Nathaniel Mcclung

OH *Northridge HS FFA*

Which Choke Tube?

Medal: **S** Kara Barclay

OR *Tillamook HS FFA*

The Creation of Hypertufa from Methane Digested Pulp

Medal: **S** Tim Lane

SD *Florence HS FFA*

Navibot

Medal: **G** Matt Hummel

TX *Columbus HS FFA*

Can You Hear Me now? Comparison of Different Types of Hearing Protection

Medal: **G** Kolton Page

UT *Lehi HS FFA*

Will giving an engine a tune-up change the amount of carbon monoxide it puts out?

Medal: **B** Katelyn Lewis

WI *Cochrane Fountain City HS FFA*

Biodiesel Synthesis from *Dunaleilla tertiolecta*

Medal: **G** David Domine

WV *Moorefield Middle School FFA*

Gone With The Wind

Medal: **S** Ben Parker

WY *Casper FFAa Natrona Co HS*

Bridge Trusses: How Much Can They Hold?

Medal: **S** Courtney Stratton

Engineering

Division II

AR *Alpena HS FFA*

Moisture Detector

Medal: **S** Jacob Weidenfeller

CA *Elk Grove HS FFA*

Don't Count Your Chicks Before They Hatch

Medal: **G** Eric Frizzie

DE *Woodbridge HS FFA*

Grain Elevators

Medal: **B** Jeremy Messick

FL *Ferguson Senior*

What is the Most Efficient Variation of a Wind Turbine in Suburban/Farmland Areas?

Medal: **G** Charlton Cheng

GA *Houston County HS FFA*

Water as Fuel - Hydrogen Fuel Cell by Electrosynthesis by Water

Medal: **S** Andrew Dixon

IA *West Central FFA*

Turbine Design Efficiency (Phase III)

Medal: **S** Daniel Wilson

IL *Southeastern HS FFA*

Biofuel Efficiency

Medal: **S** Brady Holst

LA *Fontainebleau FFA*

1/2 Hydrogen, 1/2 Gas - Building a Hydrogen Generator

Medal: **S** Fallan Lowder

MN *Belle Plaine HS FFA*

3-D GPS Part 3

Medal: **G** Krystal Clines

MO *Chillicothe FFA*

Corn Meter Modification on Corn Singulation

Medal: **S** Kellin Ferguson

MT *Fairfield HS FFA*

Biodiesel

Medal: **B** Taylor Woods

NC *Wake Forest-Rolesville*

Can a Hydrogen Generator Increase Fuel Mileage

Medal: **G** Jay Blackwelder

NM *Shiprock FFA*

Difference between Gas and Non-Gas Mig Welding

Medal: **B** Kodi Boyd

NY *Uniondale FFA*

Tissue Engineering: Using the Electrospinning Process to Engineer 3D Scaffolds

Medal: **S** Katherine Ynsinare

OH *Utica Senior HS-Ffa*

The "R" Factor

Medal: **S** James Scanlon

OR *Tillamook HS FFA*

Creating Fuel Pellets From Methane Digested Pulp

Medal: **G** Joseph Meyer

SC *Calhoun Falls HS FFA*

Hypertension

Medal: **B** Scott Sherard

SD *Garretson HS FFA*

Wind Turbine Comparison

Medal: **B** Nick Mueller

TX *Madison HS-Ffa*

Cutting Time...Cutting Cost...Cutting Metal... a combustible conversation

Medal: **G** Anna Haines

WV *Ripley HS FFA*

Evaluation of Visible Spectrum Targets for Control of *Musca domestica*

Medal: **B** Parker Winters

WY *Pinedale HS FFA*

Rock On

Medal: **B** Paden Fairbanks

Engineering

Division III

CA *Elk Grove HS FFA*

Got Some Gutsy Grommets?

Medal: **G** Chrissy Edmiston Gerald Moen

DE *Smyrna Middle FFA*

Dynamic Diesel vs. Guzzling Gas

Medal: **B** Lee Severson Thomas Smith

IA *Central Lee FFA*

What's in your attic?

Medal: **S** Kayla Hasper Emilee Rairden

IL *Galesburg HS & Avc-Ffa*

The Effects of Blade Length on Energy Output of Wind Turbine

Medal: **S** Webster Gehring Jacob Inness

IN *Tri County HS FFA*

Chemical Batteries

Medal: **S** Heather Lehe Robin Foutch

KY *Jessamine Co FFA*

More Efficient Energy

Medal: **S** Josh Johns Kaleb Paul

MA *Cape Cod Rg Tch HS FFA*

HOT

Medal: **G** James Kaplan Stephen Barcsansky

NJ *Biotechnology HS FFA*

Burn Baby Burn: The Analysis of the Energy Efficiency of Substances

Medal: **G** Neil Jethani Daniel Ipaktchi

OR *Tillamook HS FFA*

Hypertufa forms from Methane Digested Pulp

Medal: **B** Erika Fjarlie Haley Emerson

TX *Madison HS-Ffa*

Bass or Bust - Fishing Line Exposed - A study evaluating the storage practices on fishing line strength

Medal: **B** Sabrina Christian Hailey Rabe

UT *Bear River HS FFA*

Using Heat of Ensiling to Prevent Freezing in Water Troughs

Medal: **G** Clint Noyes Joshua Bunderson

WI *New Auburn HS FFA*

Hydrogen vs. Battery

Medal: **S** Brett Baker Cody Baldry

Engineering

Division IV

AZ *Mesquite HS FFA*

Crappy Creations! Creating Paper From Animal Feces

Medal: **G** Meghan Marcum Gabriela Ugartte

DE *Networks FFA*

Not Your Typical Farmer

Medal: **B** Ian Dutton Amber Benson

FL *Turner Tech Arts-Miami Sr FFA*

Producing Biodiesel as a New Way of Recycling

Medal: **S** Melissa Wilson Catherine Sepulveda

GA *Temple FFA*

Any Way The Wind Blows - A Comparison Of Turning Force Generated By Various Designs Of Wind Turbine Rotors

Medal: **B** Alisha Conn Hope Wetherbee

KY *Jessamine Co FFA*

Homemade Livestock Marker

Medal: **S** Hunter Dean Michael Goodlett

MD *Boonsboro HS FFA*

Going Green with Biodiesel

Medal: **S** Kayla Eury Erin Canfield

MN *Ag & Food Sci Academy FFA*

Effects of Substances on the Diameter of Bubble Production

Medal: **G** Phillip Middlemiss Stephen Middlemiss

NC *J F Webb HS FFA*

Going Green With Compost Tea

Medal: **S** Jeb Rector Michael Sizemore

NY *Uniondale FFA*

Alfalfa Extract as a Flame Retardant

Medal: **S** Lauren Wheeler Christina Ford

OR *Tillamook HS FFA*

Utilizing Whey Powder for the Production of Ethanol

Medal: **G** Victoria Callaway Emily Whalen

PA *Conococheague FFA*

The Effectiveness of Insulation Materials

Medal: **B** Rachele Zeis Kaitlyn Hoton

TN *Grundy Co HS FFA*

Gelling or Not Gelling

Medal: **B** Tiffany Layman Megan Coffelt

TX *Madison HS-Ffa*

can You Hear Me Now

Medal: **S** Zachary Redinger Joshua Willemin

UT *Lehi HS FFA*

Diesel Power: Testing the horse power in different fuels

Medal: **S** Jacob Busk Brad Wilson

WA *Sumner FFA*

Big or Small?

Medal: **G** Alexis Brendible Sarah Josten

WI *Cochrane Fountain City HS FFA*

Synthesis of Biodiesel

Medal: **G** Justin Scheel Derek Nelson

Environmental Science

Division I

AR *Alpena HS FFA*

Leaching Lead

Medal: **G** James Rose

CA *Davis Sr HS FFA*

Putah Creek Water Quality

Medal: **S** Matteo Poort

DE *Smyrna Middle FFA*

Oil Spill Response

Medal: **S** Danielle Lubbers

FL *Okeechobee Brahman HS FFA*

Does Pond Water Make a Difference?

Medal: **S** Ashley Hassan

GA *Perry Middle-Ffa*

Which Soil Holds The Most Water?

Medal: **B** Joshua Pitzer

IA *South Obrien HS FFA*

Soil Erosion Prevention Using Feathers

Medal: **G** Evan Magnussen

KY *Jessamine Co FFA*

Less Cost Less Pollution

Medal: **B** J.P Lilly

MN *Kerkhoven Murdock Sunburg Kms*

Cow Versus Pig: Which Manure Produces More Methane?

Medal: **G** Jared Krieger

MO *Mansfield R-Iv HS FFA*

The Effects of Time and Temperature on the Growth and Germination of Missouri Native Seeds

Medal: **S** Lexi Sherman

NE *Syracuse Dunbar-Avooca HS FFA*

The Effects of Tillage Practices on Sequestering Carbon

Medal: **S** Dalton Dozier

NM *Moriarty HS-Ffa*

Can CO2 make your plants vertically challenged?

Medal: **G** Megan Mouser

NY *Uniondale FFA*

The Impact of Noxious Weeds on Horticultural Plants and Nuisance Insects

Medal: **G** Zhane' Greene-Small

OH *Mechanicsburg HS FFA*

Which Soil Type Drains the Fastest?

Medal: **S** Thomas Bethel

OR *Newberg HS FFA*

The Effects of Vegetation On Water Qualities

Medal: **B** Neil Gravatt

PA *Chambersburg FFA*

Measurement of Water Pollution

Medal: **B** Cody Laughlin

TN *Adamsville HS FFA*

The Effects of Chemicals on Plant Growth

Medal: **B** Christopher Smalley

TX *Harmony HS FFA*

Going for the Green

Medal: **S** Taylor Bunn

UT *Lehi HS FFA*

The Effect of Soil Texture on Plant Growth

Medal: **S** Whitney Peck

VA *Admiral Byrd FFA*

effect of vitamins on plants growth, number of flower, and number of pods

Medal: **B** Brett Speakman

WI *Barron HS FFA*

Keep Soil With Your Eyes on Water

Medal: **S** Grandon Schiel

WV *Mason Co Vo Tech CTR FFA*

Holy Cow @ Manure vs. Wood Which Ones Burns Better?

Medal: **G** James Wilson

WY *Pinedale HS FFA*

Water Water Everywhere Year Two

Medal: **G** Thomas Shaffer

Environmental Science

Division II

AR *Alpena HS FFA*

Chicken Run

Medal: **S** David Bright

CA *Escalon HS FFA*

Sustainable Agriculture: The Usefulness of Recycling Shredded Almond Brush Into Soil on the Orchard Floor

Medal: **G** Derek Veenstra

CO *Arickaree HS-Ffa*

The Dirt On Sulfate Poisoning II: Conversation Practices and How to Present Runoff

Medal: **S** Rebekka Mccaleb

GA *Franklin Co HS FFA*

Chicken Litter: A Pasture's Secret Ingredient Part 4

Medal: **G** Moriah Eavenson

IA *West Central FFA*

Butanol as an Alternative Fuel

Medal: **S** Drew Sherman

IL *Southeastern HS FFA*

Bioremediation: The Effectiveness of Pseudomonas putida

Medal: **S** Allison Ramsey

KS *Smith Center HS FFA*

Food?... Or Poison?

Medal: **B** Alexis Wingerson

MA *Cape Cod Rg Tch HS FFA*

Percolation

Medal: **B** Rebecca Pazolt

MO *Tuscumbia FFA*

Protecting Our Water from Heavy-metal Contamination by Remediating Contaminated Soils

Medal: **G** Cheyenne Gardner

MT *Chinook FFA*

Is It Really a Miracle

Medal: **B** Jaycie Mitchell

NC *Crest HS FFA*

What's the Buzz About?

Medal: **S** Jordan Ledbetter

NJ *Biotechnology HS FFA*

Pollution Percentages on the Growth of Wisconsin Fast Plants

Medal: **G** Nicole Yaron

NM *Des Moines HS-Ffa*

Cedar Trees and Grass Growth Phase 6

Medal: **S** Lyndi Owensby

NY *Uniondale FFA*

"Go-Green" Approach to Reduce the Urban Heat Island Effect and Storm Water Runoff

Medal: **S** Michelle Ynsinare

OR *Tillamook HS FFA*

The Effect of Copper from Pressure Treated Lumber on Water Quality and Algae

Medal: **S** Olga Lane

TX *Madison HS-Ffa*

Nitrate Knockout@ A Study of the Effects of Nitrate Phytoremediation in Contaminated Wastewater using Hordeum vulgare

Medal: **G** Shivani Gaitonde

WA *Sumner FFA*

Geographic Distribution of Vector-Borne Pathogens

Medal: **G** Timothy Hurd

WI *Cochrane Fountain City HS FFA*

The Origins of Groundwater Nitrates

Medal: **S** Kyle Tollefson

WV *Moorefield HS-Ffa*

The Proof's in the Litter, Part III

Medal: **S** Michelle Biser

WY *Pinedale HS FFA*

Condensate Clean up

Medal: **G** Emily Johnston

Environmental Science

Division III

DE *Alfred G. Waters MS FFA*

Reflections on Water

Medal: **S** Greg Hughes Michael Capotrio

FL *Redland Middle School FFA*

Effect of Organic Matter on Soil pH

Medal: **B** Dixon Tyler Teresa Suits

GA *Perry Middle-Ffa*

Which Wood Would Stand Strong?

Medal: **S** Tyler Claxton Drew Rowell

KY *New Haven FFA*

Soil Erosion

Medal: **B** Kayla Williams Stephanie Donnelly

NJ *Biotechnology HS FFA*

The Truth About Kitchen Cleaners - The Effect of Active Ingredients on Bacteria

Medal: **G** Emily Bourke Nicollette Canale

TX *Lometa HS FFA*

Vermicomposting: The Improved Fertilization

Medal: **B** Jared Purser Christopher Scarborough

UT *Lehi HS FFA*

What is causing the suspended particles in the Jordan River?

Medal: **S** Samantha Jackman Brylee Reed

WI *Spencer HS FFA*

What Type of Fertilizer Produces the Most Phosphorus Runoff?

Medal: **G** Aaron Zimmerman Kyle Herman

Environmental Science

Division IV

CA *Galt Uhs FFA*

The Absorbency of Ammonia Emissions of Various Animal Beddings

Medal: **S** Dylan Davidson David Davidson

DE *Christiana HS FFA*

Slow the Flow

Medal: **B** Megan Greenfield Chelsea Kelley

GA *Franklin Co HS FFA*

Caloric Content of Wood

Medal: **G** Trevor Correia Josh Barron

IL *Taylorville HS FFA*

Nitrogen Types and Their Soil Holding Capacity

Medal: **B** Lanae Ringler Kaitlyn Micek

KY *Western Hills HS FFA*

Clean or Dirty You Decide

Medal: **S** Andrew Ballard Ronald Lewis

MA *Cape Cod Rg Tch HS FFA*

Acid Rain

Medal: **S** Samantha Florentine Nicholas Maynard

MN *Ada-Borup FFA*

Bioremediation of Carbon Dioxide Using Glenodinium Algae

Medal: **S** Hoang Capistran-Murphy Mercedes Lee

MS *Byhalia HS-Ffa*

The What If's of Water

Medal: **S** Julia Green Katelyn Terrell

NC *Person HS FFA*

How Dirty Is Your Soil?

Medal: **G** Landon Poole Rachel Mcfarland

NM *Tularosa HS-Ffa*

The Effects of Slope on Soil Erosion

Medal: **B** Paige Carner Cheyenne Cope

NY *Uniondale FFA*

THE UNKNOWN PHENOMENON: Mycohrrizal Fungi and the Benefits of their Symbiotic Relationship with Vigna radiata and

Medal: **G** Javier Flores Rishal Hosein

OR *Tillamook HS FFA*

Removing Copper and Zinc from Methane Digested Pulp

Medal: **G** Joel Hamburger Brad Hamburger

TN *Grundy Co HS FFA*

pH Effects

Medal: **B** Cody Barks Michael Meeks

TX *Madison HS-Ffa*

A Sweater for Your Home

Medal: **G** Patricia Ward Tasha Womack

UT *Bear River HS FFA*

Backyard BTU's: A Study of the Fuel Value of Common Weeds

Medal: **S** Tyrell Stephens Shaunie Newman

WV *Ripley HS FFA*

Retention of forested buffer strips: An Investigation of site reclamation

Medal: **B** Caleb Smith Auvielle Anderson

Zoology

Division I

AR *Drew Central HS FFA*

Ageing Fish II

Medal: **B** Henry James

CA *Lodi HS FFA*

The Role of Feed Supplements and Their Effect on Hoof Growth in Horses.

Medal: **B** Caitlin Wolford

CO *Dove Creek FFA Chapter*

Biological Control of Canada Thistle: Phase III - Testing Local Crops for Damage by Canada Thistle Insects

Medal: **S** Nakayla Lestina

DE *Redding Middle FFA*

Hungry, Hungry, Caterpillars

Medal: **B** Emily Finch

FL *Taylor HS Jr FFA*

Which Fly Trap is the Most Cost Effective?

Medal: **G** Lindsey Haynes

GA *Lagrange HS FFA*

Egg-Citing

Medal: **S** Jagger Johnson

IA *South Obrien HS FFA*

Displaced Abomasum: An Easier Fix?

Medal: **B** Landon Lenhart

IL *Taylorville HS FFA*

A Comparison of the Viability and Motility of Bovine Semen at Different Thaw Temperatures

Medal: **G** Rochelle Meteer

KY *Franklin Simpson HS FFA*

Which Bubbles Clean the Best?

Medal: **S** Anna Meador

LA *Fontainebleau Junior FFA*

Preventing Ctenocephalides felis: A Study of Flea Control Products

Medal: **G** Ashleigh Boudreaux

MN *Marshall HS FFA*

Isolation of Staphylococcus Hyicus and Streptococcus Equisimillis and Use of Isolate to Develop Avian Antibodies to Be Used in

Medal: **G** Samantha Welu

MO *Tuscumbia FFA*

Natural Wonders A Study of the Effects of Natural Herbs and Spices on Spider Repulsion

Medal: **G** Cole Lawson

NM *Moriarty HS-Ffa*

Crack-a-Lackin Eggshell Thickness

Medal: **G** Sydney Stuart

NY *Uniondale FFA*

The Ants Go Marching Tow by Two: the Quest for Environmentally Friendly Formicidae Pesticide

Medal: **S** Tatianna Norworthy

OH *Northridge HS FFA*

Who's Buff and Tough

Medal: **S** Abigail Nye

OK *Burlington HS-Ffa*

Shrink and Sink

Medal: **S** Lane Newlin

OR *Yamhill Carlton HS FFA*

What breed of boar fresh semen has the longest shelf life after collection and shipping?

Medal: **S** Colby Duyn

PA *Greenwood HS FFA*

Laying in the Puddle

Medal: **S** Alex Potter

SD *Florence HS FFA*

Which Cat Litter is Best?

Medal: **B** Jordan Wellnitz

TN *Daniel Boone HS FFA*

Watch Your Weight Mamma - The Effect of Body Condition Score on Conception in Sheep

Medal: **B** Kalen Lewis

TX *Florence FFA*

Which Angus Beef is More Tender; Natural vs. Certified

Medal: **S** Corrie Terharr

UT *Lehi HS FFA*

Comparing Nutrient Levels on Animal Growth

Medal: **B** Ashlie Abshire

VA *Signal Knob Mid Sch FFA*

Feed Battle: Generic vs. Name Brand

Medal: **S** Bethany Gochenour

WI *Brillion HS FFA*

Does BST Work?

Medal: **G** Blake Klessig

WV *Mason Co Vo Tech CTR FFA*

The Effects of Amino Acid Imbalance on the Egg Production of Gallus domesticus

Medal: **G** Wesley Davis

Zoology

Division II

AR *Alpena HS FFA*

To Preserve or Not to Preserve Phase IV

Medal: **G** Bayley Shields

DE *Smyrna High School FFA*

The Effect of Common Household Products on Insect Control in Livestock

Medal: **B** Lauren Voss

FL *Sarasota Riverview High FFA*

Frozen vs. Live

Medal: **S** Alex Massey

IN *Cloverdale HS FFA*

The Effects of a Vegan and Vegetarian Diet on Rat Development

Medal: **S** Brittanie Branneman

KY *North Laurel HS FFA*

Red... Green... Blue.... In What Color Do Horses See You?

Medal: **S** Jessica Gambrel

LA *Zachary HS FFA*

What Food Source Do Deer Prefer in Wakefield, LA?

Medal: **B** Galen Kent

MA *Essex Ag & Tech Inst FFAa Chapt*

Mega Mice

Medal: **S** Kiera Latham

MN *Marshall HS FFA*

Is it possible to reduce the bacterial number and thus the progression of propionibacterium acnes with a natural therapy?

Medal: **S** Taylor Welu

MO *Tuscumbia FFA*

Determining the Nanotoxicity of Copper on Aquatic Invertebrates

Medal: **G** Brittany King

MS *Sumrall HS FFA*

Egg Shell Quality and Specific Gravity

Medal: **G** Hannah Roberts

NC *Northwest Cabarrus FFA*

"Come & Get It!" Canine Palatability Trial

Medal: **S** Elizabeth Dudley

NM *Las Cruces HS-Ffa*

Cattle Pregnancy Detection

Medal: **B** Joslyn Beard

NY *Uniondale FFA*

Using Genetic Engineering to Create a Humanized Obesity Protein

Medal: **G** Korie Bush

OR *Newberg HS FFA*

Makin' Bacon

Medal: **S** Kory Blake

PA *West Perry HS FFA*

The Effects of Different Lighting Scenarios on *G. domesticus* Average Eggshell Thickness

Medal: **G** Brett Shelley

SC *Calhoun Falls HS FFA*

Cakes for Catfish

Medal: **B** William Sherard

TN *Dekalb Co HS FFA*

The Effects of MOOsic

Medal: **S** Stephanie Davis

TX *Valley View HS FFA*

Does Size Really Matter? The Relationship Between Boer Horn Base Width and Size of Loin

Medal: **G** Savannah Hernandez

UT *American Fork HS FFA*

Disproving the Inch per Gallon Rule

Medal: **B** Ashley Arnold

VA *Turner Ashby HS-Ffa*

The Effect of the Number of Different Types of Plants in a Frog's Environment

Medal: **B** Amanda Shell

WI *Big Foot HS FFA*

Trade-Offs of Whole vs. Replacer Milk

Medal: **G** Adrianna Vanderstappen

WY *Casper FFAa Natrona Co HS*

Scatological Education: The Taming of the Poo

Medal: **S** Cassidy Anderson

Zoology

Division III

AR *Alpena HS FFA*

Prime Steak

Medal: **S** Lauren Widner Steven Widner

CA *Lodi HS FFA*

A Comparison of Feeding Conventional Rabbit Feed vs. Organic Rabbit Feed on the Weight Gain of Lion Head Rabbits

Medal: **S** Courtney Miller Shelbi Thall

DE *Christiana HS FFA*

Twice the Price

Medal: **G** Ronald Phipps Robert Phipps

FL *Brooksville Sr. FFA*

Heart Rate

Medal: **B** Marissa Mancillas Meghann Myers

GA *Temple FFA*

Fickle Feces - An Efficiency Comparison of Various Equine Deworming Products

Medal: **S** Cassie Hylton Taylor West

KY *New Haven FFA*

One Fish, Two Fish

Medal: **B** Katelyn Thomas Chelsey Davis

NJ *Biotechnology HS FFA*

The Effect of Variation in Diet on Crayfish Color Change

Medal: **G** Katherine Rittenbach Daria Lukasz

OK *Tipton HS FFA*

Goat Growth

Medal: **B** Kennedy Gilbert Lauren Waugh

TX *Weimar FFA*

Does Moisture Matter? Comparison of Water and Feed Intake in Broilers as Amount of Moisture Increases in Feed Ration

Medal: **G** Kaitlyn Sestak Hannah Treptow

UT *Tooele HS FFA*

Chicken Comfort and Egg Production

Medal: **B** Katelynn Kofford Shawna Leonelli

WA *Yelm HS FFA*

The Power on Your side

Medal: **S** Janae Costa Ariel Wolfe

WI *New Auburn HS FFA*

Treats for the Equine

Medal: **S** Hunter North Erica Francis

WY *Casper FFAa Natrona Co HS*

Fowl Food!

Medal: **G** James Rosenbaum Lisa Andreen

Zoology

Division IV

AR *Alpena HS FFA*

Moody Blue: A study of the effect of blue lights on Vitiligious chickens and commercial chickens

Medal: **S** Ashley Smith Lesley Smith

AZ *Aaec – Paradise Valley*

An Improved AFLP System for Genotyping Rare Frogs

Medal: **G** Charles Pressler Taylor Ortiz

CA *Escalon HS FFA*

Comparing Internal Parasite Resistance Using ELISA and FEC in Barbados and Suffolk Crossbred Sheep

Medal: **S** Emily Duarte Mary Steves

DE *Indian River HS FFA*

To Color or Not to Color: An Analysis of Color Enhancing Fish Food

Medal: **S** Nicole Wagner Kacy Cassat

GA *Tift Co. FFA*

Those Unpredictable Goats

Medal: **B** Kari Giddens Katy Summers

IL *Waterloo HS FFA*

Lysine and Methionine Requirement of Chicks Fed Low Protein Corn-Soybean Meal Diets

Medal: **G** Rosemary Chapple Christopher Steppig

IN *Lebanon*

Testing Feed-through Fly Killers

Medal: **S** Laura Dulin Laci Richardson

KY *Jessamine Co FFA*

Do Chicks Dig the Beat?

Medal: **B** Danielle Smith Abby Teater

MD *Boonsboro HS FFA*

Hatchin'

Medal: **B** Ashlee Kline Eric Kline

MN *Stillwater FFA*

Effect of Protein Content on Quail Growth

Medal: **G** Katie Kubacki Kelvin Anderson

NC *Northwest Cabarrus FFA*

"Battle of the Sexes" The Effect of Various Training Styles on Young Canines

Medal: **S** Ashley Armstrong Hannah Fowler

NM *Shiprock FFA*

Scrapies Resistant Sheep

Medal: **B** Quanah Holyan Felixia Valdez

OK *Tipton HS FFA*

Workin' Out

Medal: **S** Kirby Brooking Jackie Lovejoy

OR *Newberg HS FFA*

Grow Baby Grow

Medal: **G** Ariana Piscitelli Alaena Wilfong

PA *Danville HS FFA*

Watch My Chicken Grow

Medal: **S** Kara Shultz Alisha Kirkner

TX *Florence FFA*

The Effectiveness of Sodium Bentonite on Aflatoxin Corn

Medal: **G** Lisa Hellier Kristin Cannon

UT *Riverton HS FFA*

Differences between Ruminants and Pseudoruminants

Medal: **G** Jessica McClellan Cassie Tolhurst

VA *Turner Ashby HS-Ffa*

Weight Gain by Different Breeds of Chickens

Medal: **B** Brooke Myers Beth Hartman

WA *Sumner FFA*

Rectal Prolapse: Is it Genetic?

Medal: **B** Kassie McAfee Haylee Olson

WI *Pulaski HS FFA*

Are Fish Finicky About Their Filters?

Medal: **S** Marc Richmond Kyle Kelsey