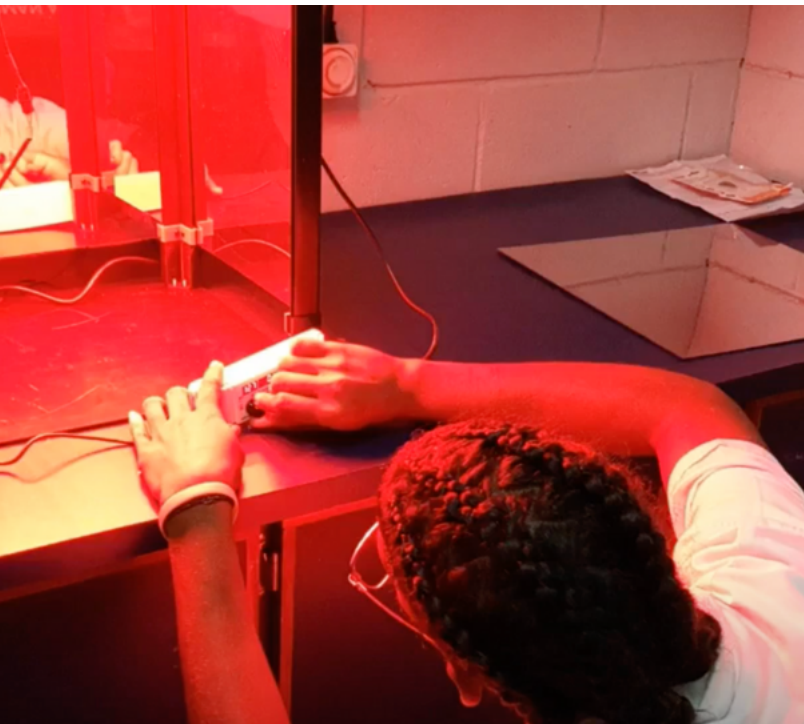
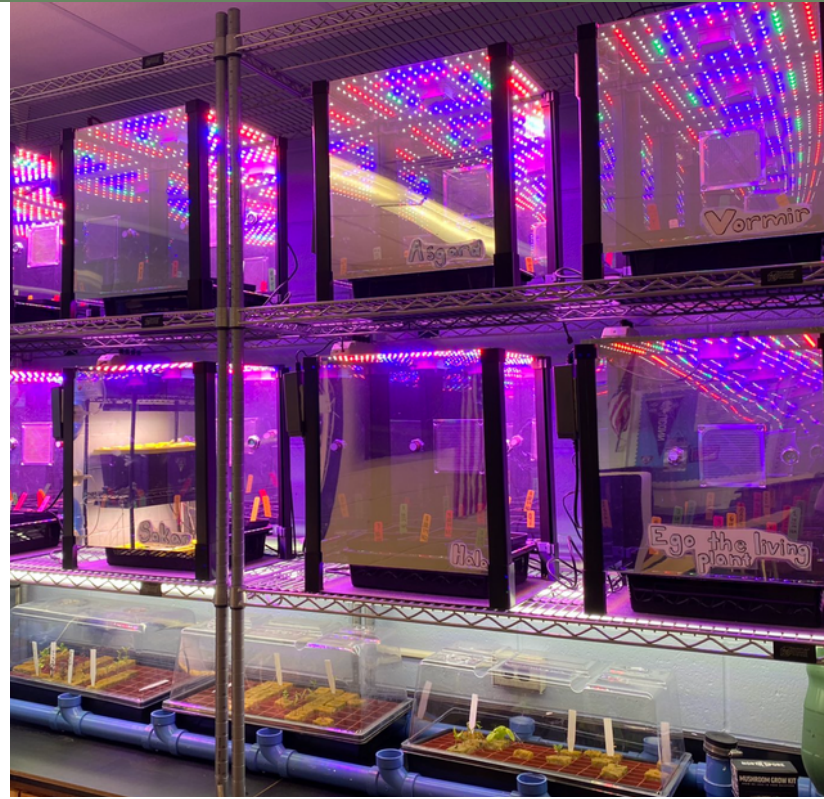
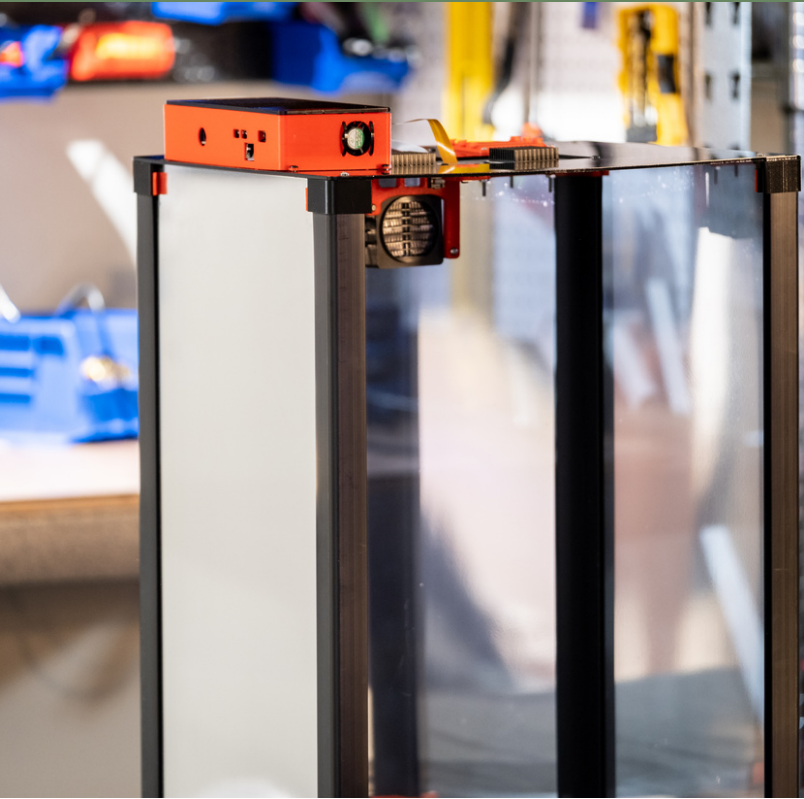


MARSfarm Product Line Brochure



peter@marsfarm.com | (314) - 766 - 2422
1805 Belt Way Dr Overland, MO 63114



MARSfarm

Who We Are

MARSfarm was founded in 2020 by Peter Webb and Drew Thomas in St. Louis, Missouri. Peter brings his background in business development and expertise in controlled environment agriculture to the team. Drew brings his education in engineering, a career in manufacturing, and vocational education experiences.

What We Do

MARSfarm has inspired students to pursue careers in agriculture by enabling educators to provide modern farming experiences in the classroom. We design and manufacture our equipment in St. Louis, MO. Our products are being used by 500+ schools, all around the world.

THE MARSFARM ADVANTAGE

There is a technological revolution occurring in the agricultural industry to ensure that humans will be able to sustainably feed our growing population in a changing climate. The instructional materials available to the agricultural educators responsible for training the next generation of farmers have not kept pace with the latest technology that those future farmers will use in their careers.



MARSfarm brings ag-tech into the classroom by providing a solution for agricultural educators to give students early exposure to emerging industry practices and problems. Countertop-sized greenhouses designed for the classroom are the enabling hardware of this platform. Our software provides the ability to execute control sequences (called "recipes") in these greenhouses and remotely monitor them. Consumable kits consisting of seeds, and fertilizer are paired with "recipes" designed in partnership with pioneers of emerging agricultural technologies. This combination of equipment, software, and consumables will ensure that educators are always teaching industry-relevant skills, leading to valuable career education.

What is Controlled Environment Agriculture (CEA)?

CEA represents a modern approach to farming that leverages tech to create an optimized environment for plant growth, enabling year-round production, sustainable practices, and efficient resource utilization.

What is the value of MARSfarm products?

Our greenhouses, similar in size to a microwave oven, provide the opportunity for hands-on experience with CEA technology in a classroom setting. The LEDs, fans, and irrigation systems in our greenhouses replicate those used in larger-scale CEA operations.

What careers can a MARSfarm prepare students for?

CEA equipment technician, greenhouse cultivation manager, plant scientist, agricultural engineer, culinary careers, computer programmer, data scientist, etc.

Why is a MARSfarm well-suited for AgEd?

Each greenhouse can be operated independently, allowing students to use them for FFA Agriscience Fair or Supervised Agricultural Experiences without disrupting regular classroom instruction.

Does a MARSfarm qualify for Perkins funding?

Yes, our greenhouses qualify as "Equipment for CTE Instruction" under Perkins' Allowable Expenditures. In fact, most schools have purchased our greenhouses using funds from Perkins allotments.

OUR GREENHOUSES

Fairchild Garden Version 4 (FGV.4)

16.5" x 13" x 18"

MARSfarm Version 1 (MV.1)

16.5" x 13" x 26"



Made in the
United States

**3
Year**

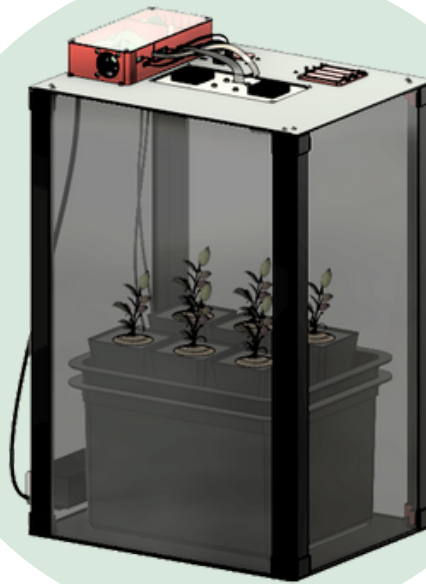
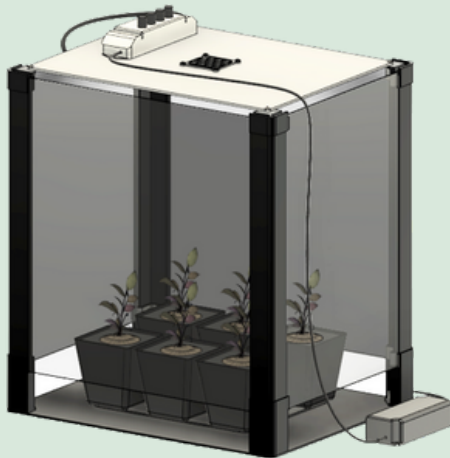
3-Year
Warranty



Dedicated
Customer
Support



Ask About
School District
Pricing



Specifications

FGV.4

MV.1

Max Growth Height

14" (herbs, leafy greens, microgreens,
model crops, etc.)

20" (herbs, leafy greens, tomatoes, peppers,
strawberries, etc.)

Environmental Monitoring Sensors

Temperature and Humidity

Temperature, Humidity, and CO2

Environmental Control

None

Increase temperature up to 90°F (assuming
ambient of 72°F)

Irrigation System - Capacity

Wicking tray - refill every 3-7 days

Pump and 2-gallon reservoir - refill every 14

Irrigation System - Automation

None

Custom recipes to prescribe mL at any time
of day

Airflow

Circulation Fan

Circulation and Exhaust Fans

LED System

4 Spectrum LED (red, blue, green, white) -
knob controller

4 Spectrum LED (red, blue, white, far-red) -
custom recipes

Software Interface

Google Sheets (manual)

Charts of sensor data, high-quality photos

Ideal Course

K-12 General Science Courses

7-14 CTE and Ag Courses



CUSTOMER SPOTLIGHT: BREANNA PASTIR

Senior Educational Consultant & SAE for All Specialist at National FFA, & Here By The Owl Podcast Co-Host

"MARSfarm allows for an easier way for a teacher to teach plant science by integrating computer and data sciences, expanding beyond the limitations previously seen in agricultural education. MARSfarm grants students the ability to grow into careers in computer programming, data science, and manufacturing. The units bring inquiry-based and experiential learning into the classroom. MARSfarm opens up an avenue to perform the experiments students want to showcase to the world through agriscience fairs, FFA proficiency projects, and SAEs."



CUSTOMER SPOTLIGHT: JAMIRA GUILLORY

Sophomore Year Student, 7th place in National Agriscience Fair

"MARSfarm units changed my mind about what farming and agriculture entail. When I signed up for my first agriscience class, I was thinking I would be sitting through an hour listening to how to be a farmer. MARSfarm helped me realize that agriculture is not just farming and livestock, it is much more, and I can be that more. Being in an urban area, with no greenhouses near, I have still been able to experiment with light duration for leafy greens (specifically using MARSfarm's Bok Choy kit) right in the classroom. MARSfarm has changed the course of my future and helped me realize how I can fit into and be the future of agriculture."



CUSTOMER SPOTLIGHT: REGINA SMART

Agriscience Teacher & FFA/SAE Advisor, 27 Years

"MARSfarm has changed the way I teach Agriscience. It has allowed me to provide my students with hands-on educational experiences using STEM through plant science and agriculture. I do not have a traditional facility with a greenhouse, but the MARSfarm units bring plant production inside the classroom. I have spent so much of my career teaching traditional plant production but now, I am able to teach modern practices that better relate to my students in an urban setting. MARSfarm has brought success to my students inside the classroom and with the FFA. My students are being exposed to professional careers they wouldn't have known about or been prepared for otherwise."

Connect with MARSfarm

1) Visit our website for a quote:

www.marsfarm.com

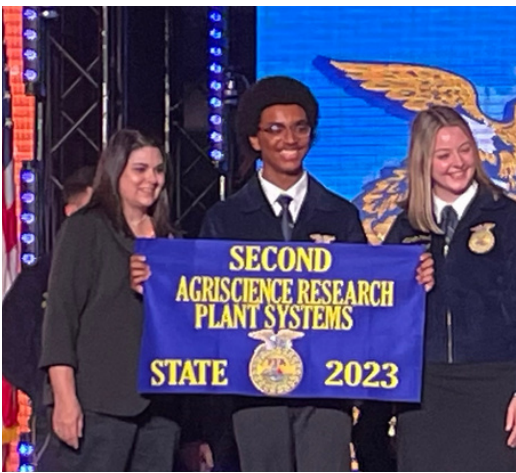
2) Watch for new releases [@getMARSfarm](https://twitter.com/getMARSfarm) on Twitter, Instagram, and Facebook

3) Read how existing customers are using our products at [MARSfarm Community Forums](#)



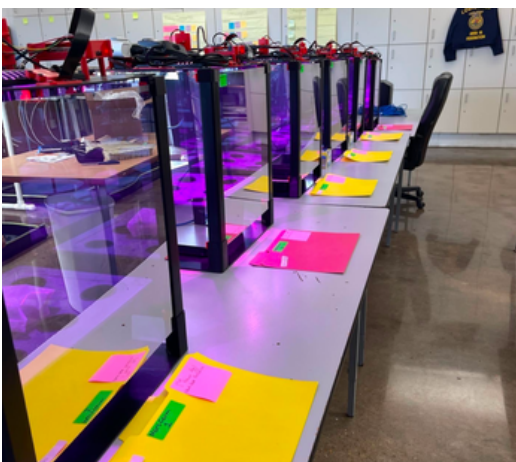
**SEE MARSFARM
IN ACTION!**

MARSfarm IN THE CLASSROOM



Regina Smart Westlake High School

Meet Regina Smart, an agriscience teacher of 27 years who has worked to revolutionize her urban classroom that doesn't have access to a traditional greenhouse. By utilizing the MARSfarm Mini and Growing Beyond Earth units, Regina offers her students a hands-on learning experience, immersing them in modern agricultural practices while encouraging the development of leadership and personal success. Regina has utilized the units in her Agriscience I, II, and III classes, along with her Agricultural Leadership courses. Regina insists that "MARSfarm has changed the way I teach."



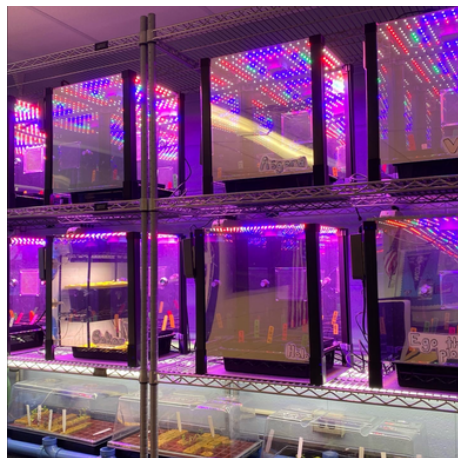
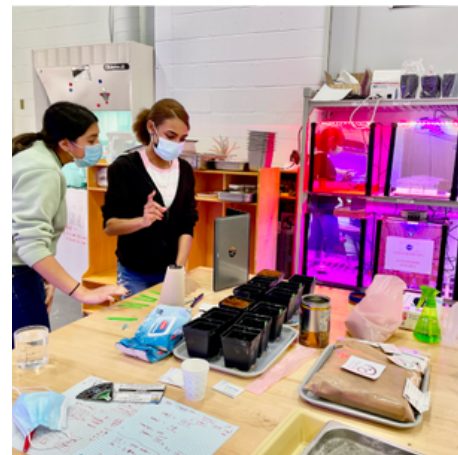
Within Regina's FFA chapter, Jamira Guillory has utilized MARSfarm units to experiment with light duration for leafy greens, resulting in a 7th-place win at the National Agriscience Fair. Now, Jamira collaborates with MARSfarm to test diverse plant types and environmental conditions, seeking to expand his knowledge and elevate the MARSfarm plant growing experience for all.

Dr. Surendra

Booker T. Washington High School

Meet Dr. Surendra Maha, an accomplished CTE, agricultural, and horticulture teacher with a background in plant research. His mission is to enhance classroom learning through research-based approaches. By utilizing MARSfarm Version 1 and Growing Beyond Earth Units, he empowers students with data-driven science education, fostering a deeper understanding of diverse plant-growing environments and the interactions between different plants.

Dr. Maha's innovative integration of MARSfarm units spans various courses, such as Principles of Agriculture, Greenhouse Operations, Horticultural Science, and Scientific Research and Design. He has secured grants and incorporated MARSfarm greenhouses into multiple experiments thanks to his efforts, providing students with a well-rounded Ag-Education experience.



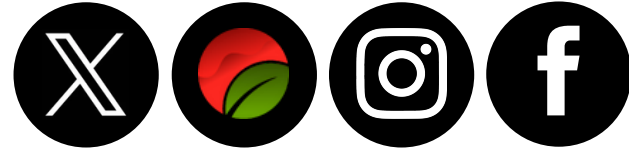
Chris Regini

West Hollow Middle School

Meet Chris Regini, a Raspberry Pi certified educator with 18 years of experience, who integrates the engineering design process into his curriculum. He employs MARSfarm to bridge computer programming, engineering, electronics, and plant science learning, giving his students an authentic environment for food growth experiments using MARSfarm's Growing Beyond Earth and MARSfarm Version 1 units.

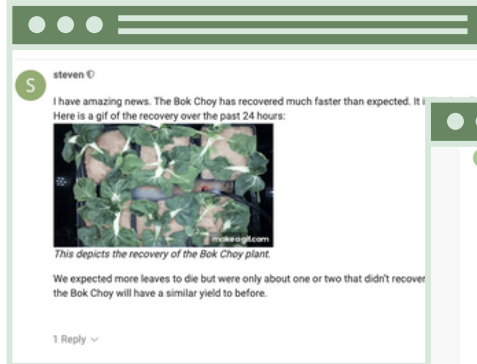
Chris's students have excelled at customizing Growing Beyond Earth units into fully automated systems while gathering essential environmental data. His students' achievements have even garnered recognition at local and national levels, with two of his eighth-grade students winning first place at the Growing Beyond Earth Maker Challenge and presenting their work to NASA scientists. This success enabled Chris to secure funding for an AgTech Lab where students will be able to research maximizing leafy green and fruiting vine crop yields. Chris is leveraging MARSfarm technology to help even more students throughout his district bridge the gap between computer science and agriculture in this new and unique learning environment.

OUR COMMUNITY

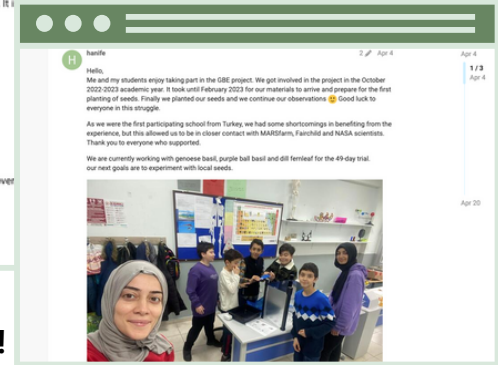


MARSfarm Forums

To foster connections among MARSfarm users, we have created the MARSfarm Community Forums. These forums cover a wide range of topics, from teachers' successful integration of MARSfarm units into their classrooms to discussions about our hardware and facility. We encourage you to explore this resource and share your own plant growing expertise!



Karabük Science and Art Center Does GBE!



"MV1 Summer Trials"
Watch MV1s in Action!

Forum Topics Include:

- Education (i.e. CTE, Experiments, Higher Ed)
- Software
- Announcements
- Hardware (i.e. MV.1, FGV.4, DIY)
- Informational (i.e. Plant Science)
- Feedback

MARSfarm on Twitter



Watch MARSfarms in Action in Schools Around the World!

Westlake Future Farmers of America (FFA) Agriscience & MARSfarm in Westlake, LA

GBE Setting Up at BSS (Brazil Secondary School) in San Rafael, Trinidad & Tobago