## Column: IMSA grad from Sandwich wins award for eco-friendly pesticide

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Matias Habib, a recent graduate of the Illinois Math and Science Academy in Aurora who is from Sandwich, was recently honored for developing an eco-friendly pesticide that will kill or repel the invasive Japanese beetle.

To describe 18-year-old Matias Habib as a remarkable teen would be an understatement on a couple of levels.

The 2023 graduate of the Illinois Math and Science Academy in Aurora, who hails from Sandwich, has been named a recipient of a \$10,000 award as a winner of The Gloria Barron Prize for Young Heroes. Which itself is worthy of applause, as this honor only goes to 25 outstanding young leaders nationwide, 15 of which, like Habib, receive money from author T.A. Barron, who founded the award in 2001 that is named in memory of his mother.

What makes this young winner even more impressive is the impact his accomplishments could have on our environment.

Habib, who was in between classes when I caught up with the freshman at the University of Illinois in Champaign on Tuesday afternoon, has developed an ecofriendly pesticide to combat the Japanese beetle, an invasive species that devastates U.S. crops every year.

His foliage spray, a natural mix of plant oils and amino acids that qualifies for an EPA minimum risk pesticide, is in the final stages of the patenting process, which he hopes will be completed any day.

Habib told me his love of science goes back to his early childhood, as does his love for the environment. Born in Chicago, he moved at age 3 with his parents, Kathleen Janick and Omar Habib, to a plum farm they owned in southern France after the recession hit.

The property was surrounded by other organic orchards, so it was no surprise that when the family moved to Sandwich eight years ago when his grandfather became ill, they planted apple, cherry and peach trees on their acreage, only to see the plants ravaged in the summer of 2019.

"When the Japanese beetles came into our yard," Matias Habib told me, "I became infatuated with them. I wanted to find out why this happened and make it stop."

And so the IMSA student and 4-H member, who has a particular fondness for chemistry and biology, set up a lab in the family garage, determined to figure out a natural way to fight this scourge.

He studied century-old USDA research on plant oils, experimenting with different formulas and then presented his work at the Illinois State Fair, winning a championship in entomology in the 4-H division.

It was there that a judge from the University of Illinois encouraged him to turn the research into a commercial bio-pesticide formula.

Plus, a lot of people were asking questions about the formula, he recalled, which made Habib realize "I could take this further."

And so, using a \$1,000 cash prize from an innovators contest, he launched his TerraBuster business, purchasing bulk ingredients, building a website and hiring his friends to fill bottles and glue on labels for the pesticide that he sold to a local nursery and online to commercial farmers and home gardeners.

"Customers tell me all the time it works very well," he said.

Habib did not stop there.

He also helped Harambee Gardens, a community garden in an underserved Chicago neighborhood, battle its squash bug infestation by developing a prototype bio-pesticide powder.

After all this, it's hardly a surprise he was recently honored as a 2023 Youth in Action winner by the national 4-H.

What's next for this gifted young man remains to be seen.

Habib, a nuclear engineering major who is currently researching plasma, admits he's now in a different phase of his life, with an interest in nuclear fusion. And that doesn't leave a whole lot of time to grow a fledgling pesticide business, no matter how promising.

He could sell it to someone else interested in "taking it through," Habib said, or "hold on to it until I get out of college and hit it again."

Either way, it's a given the world will be hearing more from this young scientist/researcher/entrepreneur/environmentalist, before or after he gets that Ph.D also in his future plans.

"There are lots of possibilities," Habib admitted. "Time will tell."

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