



Insight

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MIRC Works to Obtain COVID Assistance for Growers

After multiple webinars and email exchanges, as of press deadline, the MIRC's Steve Salisbury still had questions about what kind of compensation mint growers will receive from the USDA's Coronavirus Food Assistance Program.

The good news, however, is that the USDA has determined that mint producers are eligible for some compensation for the drop in market price they experienced due to the COVID-19 pandemic.

The effort to secure eligibility for mint producers involved a considerable amount of educating USDA officials about the workings of the mint industry, Salisbury said. Shane Johnson, executive director of the Washington Mint Commission, and several growers

were critical in helping with the effort, he said.

Originally, Salisbury said, USDA officials had determined that mint oil was a processed good and was therefore not eligible for compensation for a drop in market price due to COVID-19.

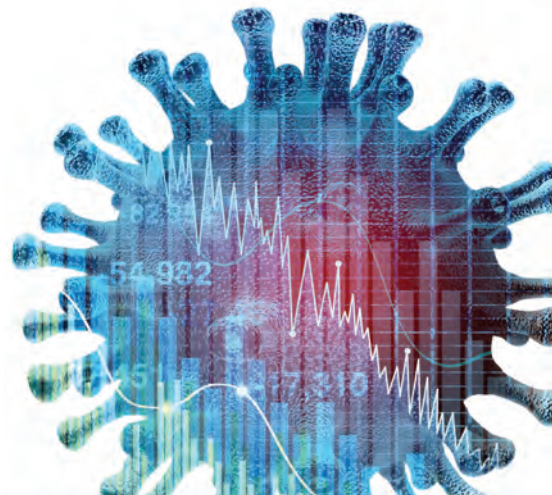
"Once we showed them that distillation is part of the harvest process and the oil is not a processed good but is the commodity itself, then USDA determined we were eligible," Salisbury said.

The next step involved coming up with a formula to determine the value of the mint that takes into account the cost of distilling the oil, Salisbury said. That distillation cost, according to the formula that the USDA is using, will be subtracted from the market price to

arrive at a figure the USDA will use to determine compensation.

Salisbury's effort to secure compensation for growers involved polling buyers to determine just how much the market price dropped during COVID. Under the USDA program, to be eligible, a commodity's market price must have fallen at least 15 percent between January 15 and April

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15. Salisbury's poll found growers definitely qualified.

"It was over a 20 percent market drop," Salisbury said.

Among questions still to be answered are how much of the percentage of the drop in market price growers will receive under the program, Salisbury said. And if a grower is paying for toll process, will he or she be required to submit what they are paying for distillation or will they be able to use a standardized industry number? "Those are a couple of the questions we still don't have answered," Salisbury said.

Growers running their own still obviously have a lower distillation cost than a grower paying for toll process, Salisbury said, which would affect the market value of the mint oil, according to the USDA formula.

As of press deadline, Salisbury said he suspects that the USDA will ask each grower to generate their own cost figures, given that each region's costs likely are a little different and each grower's cost is likely a little different.

The program, now in its second iteration and going by the acronym CFAP2, is intended to "provide

producers with financial assistance that gives them the ability to absorb some of the increased marketing costs associated with the COVID-19 pandemic," according to a USDA release. The program is being serviced in large part by local Farm Service Agency offices.

Row crops, livestock, dairy, specialty crops, nursery crops and other commodities are eligible for compensation under the program. Deadline to apply for assistance under CFAP2 was December 11.

Johnson New Chair of IPM Committee

Jeff Johnson, vice president of Callisons, has been named chair of the MIRC's IPM (Integrated Pest Management) Committee.

Johnson takes over for Mark Morris, who retired this year after 31 years with the MIRC, including 29 as IPM Committee chair. Johnson, who served as chair of the committee during the two years Morris stepped down a dozen or so years ago, said he is excited to take over the chairmanship.

"I'm disappointed to see Mark go," Johnson said of Morris. "He has been an incredible asset to the industry. He is a great guy with a ton of stories and I am certainly going to miss him. Those are big shoes to fill. But I'm excited to be taking over as chair."

Johnson brings several qualities to the chairmanship that should serve him well. He started working with mint in Montana in the 1980s, he has been with Callisons since 1996 and he has been active in the MIRC for decades.

"I think I have a good understanding of the farm side of things because I came from the farm side of things," Johnson said. "I have a good understanding of how the industry works because of my longevity in the industry, and I have a good understanding of the resources available to the committee and to the organization, just because of my longevity in the industry."

Johnson views the main role of the IPM Committee as a resource to help provide growers tools to make North American mint more successful. Typically, that involves helping the industry secure new pesticide labels and hang on to existing ones.

His first order of business, he said, will be to develop priorities in consultation with Scientific Affairs Committee Chair Eric Dowd and MIRC Research and Regulatory Coordinator Steve Salisbury.

"We are heading into a time with COVID where I think the industry in general is going to see some drop

in sales, so making sure the core researchers are supported and the core difficulties that the growers are facing are covered are at the top of my list.

"In a leaner time, it is really going to be focusing in on what do we have to have, not what do we want to have," Johnson said.

Johnson noted he has worked well with Dowd and Salisbury in the past and looks forward to doing so in the future.

"I think highly of both of them," he said. "I think they are both very good at their jobs, and so I very much enjoy working with them and supporting some of the group efforts that we have, and I look forward to doing more of that."



Jeff Johnson

Project Looks at Knowing When to End Distillation

The MIRC launched a project in 2020 aimed at determining the optimal point at which to end distillation.

“Right now, there is such a variance,” said Dale Thacker of Dale Thacker Specialty Crops in Bow Island, Alberta. “There seems to be a bunch of different techniques on deciding when you are done with cooking.”

The project was initiated by Mark Morlan of Essex.

“The intention of this was to come up with standards to produce a better quality North American mint oil,” Thacker said. “But it has opened up a whole new can of worms, because in order to achieve that, you have to be able to shut off at the right time, and know what the right time is.”

Thacker is working on the project in conjunction with Robert McKellip of Nampa, Idaho. McKellip said he pulled samples from his cooks every ten minutes, kept them separate and then sent them to Essex for testing. He replicated the experiment six or seven times, he said.

McKellip worked with peppermint, Thacker with spearmint.

“If we can show still operators that maybe that last ten minutes or twenty minutes isn’t really necessary, because say for example, you recover another \$50 worth of oil but it costs you \$50 or \$60 dollars to get it, then you are just trading dollars and you are tying up your still when you could be cooking the next batch,” McKellip said.

Also, oil quality tends to decrease over the last part of a cook, according to Thacker and McKellip, further incentivizing the need to turn off earlier.

Still operators work under a variety of different formulas, according to Thacker and McKellip. Some cook strictly by time. Others like to get all the oil available from a cook before turning off.

“We were always told that we cook by the watch,” Thacker said. “I happen to know that isn’t even close to the truth. Each stall has its own characteristics and every load is different from the one before.”

The research may show that some investment in equipment is necessary, such as purchasing and installing flow meters, McKellip said, but it could reap sizable savings in energy cost and an improvement in oil quality.

Thacker and McKellip plan to put at least one more year into the project, in part because they were unable to put the time into it in 2020 that they had hoped due to difficulties from the COVID pandemic.

“Because of COVID, I wasn’t able to put the effort into it that was needed,” Thacker said. “Hopefully next year will be a little more normal, and we can get some accurate trials.”

At that point, more refined research may be necessary, McKellip said.

“This research isn’t costing a whole lot, because we are volunteering our time,” McKellip said. “Down the road, if we decide to develop a protocol, we will probably have to fund a project so it is more scientifically based than what we are doing.”

In the meantime, Thacker noted, the research is proving beneficial. “One



thing this has pointed out to me is the importance of filling your tub correctly,” Thacker said. “If you fill the tub poorly, there is not much else you can do to mitigate quality issues.”

Key to proper tub filling, he said, is consistency. “Whether it is tightly packed or loosely packed doesn’t matter, as long as it is the same everywhere,” he said. “You want the steam front to progress through the hay charge uniformly.

“It is all related,” he said. “The quality of the final product starts way back in the process. You need to be swathng correctly. You need to have your hay dry enough. It is a whole management regime.”

And you need to know when to end distillation.

“If we can get the entire industry to shut off with the same criteria, or the same results,” he said, “we will end up with a higher quality oil.”

And probably some energy savings, as well.

Annual Meetings Go Virtual

With the annual meetings of three states and one region going virtual and the MIRC Annual Meeting postponed, meeting season for the mint industry is quite different this winter as the nation grapples with the COVID-19 pandemic.

“It is going to be a lot different than years past,” said Shane Johnson, executive director of the Washington Mint Growers Association.

In addition to the obvious change – going from an in-person to a virtual meeting – in Washington, the association’s Board of Directors decided to limit its meeting to a half-day, rather than a full-day affair, and to keep presentations focused on research and industry reports.

“A lot of the university folks are on travel bans and meeting bans. So, even if we would have had an in-person meeting, they would have had to remote-in and present virtually. And a lot of the industry folks that come in were experiencing (company-imposed) travel restrictions, so those speakers also would have had to join virtually.”

Shane Johnson,
Executive Director,
Washington Mint Growers Association

Johnson said the board decided to go virtual primarily because of limitations on the size of gatherings in place in Benton County, the site of the annual meeting.

“Shortly after we made the decision, the county moved to a phase that you could, maybe, have a meeting of that size,” Johnson said. “But, even then, we would have had to social distance and do some of those things, and it would have felt very different.”

In addition, Johnson said, there was the difficulty of getting speakers to the December 1 meeting.

“A lot of the university folks are on travel bans and meeting bans,” Johnson said. “So, even if we would have had an in-person meeting, they would have had to remote-in and present virtually. And a lot of the industry folks that come in were experiencing (company-imposed) travel restrictions, so those people also would have had to join virtually.

“And then there is just the overall concern of having a large gathering of people,” Johnson said. “You don’t want it to become a super-spreader event.”

Johnson said the association has applied to the Washington State Department of Agriculture for pesticide credits, but didn’t know as of press deadline whether the request was granted.

In Idaho, Roger Batt, administrator of the Idaho Mint Commission, said the commission’s decision to go virtual for its meeting, held on December 9, also came down to concerns over restrictions on large gatherings in Ada

County, the site of the organization’s annual meeting.

‘A Good Decision’

“It was a good decision,” Batt said.

“Even though we would like to be together in person, we think that there will still be a lot of great information through virtual platforms and we are still offering five pesticide credits for Idaho and eight CCA credits for license holders.

“The agenda is really good and I think folks are still going to get a lot out of it,” Batt said.

In the Midwest, Dan Gumz, president of the Indiana Mint Growers, said in mid-November that the board of the Midwest Mint Growers Annual Meeting was still debating whether to go virtual or hold their meeting in person. “At this point, we are leaning towards going virtual,” Gumz said.

In Oregon, the state Commission had planned to go with what Administrator Bryan Ostlund referred to as a “hybrid meeting” for its annual meeting, with presentations being virtual, while the Commissioners and League Directors would meet in person.

However, with the recent surge in COVID, Ostlund said, “The opportunity to get back to face-to-face meetings will need to wait.”

Virtual presentations will be focused on research reports and research proposals, Ostlund said, and will be open to anyone in the industry via online viewing. The presentations also will include a market report and

a MIRC activities report from Steve Salisbury.

As for the MIRC annual meeting, Ostlund said the Executive Committee decided to cancel the general session and go with two half-day virtual sessions for the Scientific Affairs Committee meeting and a half-day virtual Board meeting.

Logistical Challenges

Holding a meeting virtually as opposed to in-person presents several logistical challenges, administrators said, including determining how presentations are to be delivered. In Idaho, Batt said the commission decided to go strictly with prerecorded sessions, followed by Question and Answer chat sessions held over a live stream. The decision was made in part

to avoid difficulties with technical glitches that might arise during a live stream.

“To add to that, we are going to allow our sponsors to have some kind of a video promotion for their company,” Batt said. “How many times we air the video will depend on their level of sponsorship.”

In Washington, Johnson said the commission gave speakers the option to go with either a live-stream or prerecorded presentation.

“We’ve left it up to the individual speaker,” Johnson said. “If they want to pre-record, that is fine. If they want to join us live, that is fine, too.”

Across the board, administrators said they expect meeting participation to be down.

“We are normally at about 125 or so, maybe 150 on a really good year,” Johnson said, “but I expect that to be down a little bit this year.”

Batt said he expected attendance at the Idaho meeting to be down about half. “We normally get about 100 to 110 at the annual meeting,” Batt said. “But with this, we are planning on a fifty-percent reduction.

“There are a lot of people who go to these meetings just because they want to meet with people, talk with people, interact with people,” Batt said. “This, obviously, isn’t going to allow them to do that. But I guess this is as good as we can do under the current situation.”



Tough Herbicide Granted Full Federal Registration

In an encouraging development for weed control in mint, the Environmental Protection Agency (EPA) has granted Belchim Crop Protection full federal registration for use of Tough herbicide on mint.

The development offers U.S. producers increased flexibility over the Section 18 emergency use labels in place in several U.S. states over the past four years. Those restrictions limited Tough use to between cuts in double-cut mint. The new federal label allows up to two applications per season and carries no restrictions on when it can be applied on either single- or double-cut peppermint or spearmint.

“I think the most popular use is going to be applying it late spring over the top of actively growing mint when you have those pigweed and kochia escapes,” said MIRC Research and Regulatory Coordinator Steve Salisbury. He added that he expects growers to take advantage of the options to come back with an application between cuts and to use the product post-harvest, in some cases.

“I think it offers guys a lot of flexibility and a lot of value,” Salisbury said.



Tough, with the active ingredient pyridate, hasn't had a full federal

label for use in mint since the mid-2000s, when the chemical manufacturer Novartis, now Syngenta, voluntarily pulled its registration in mint.

More than a decade later, in 2017, the industry was able to secure a Section 18 emergency use label after the Belgian company Belchim Crop Protection obtained exclusive U.S. marketing rights to pyridate. The Section 18 label has been in place in six states over the last four years. A seventh state was added to the emergency use label in 2019.

Obtaining full federal registration, however, was always the goal, Salisbury said. Fortunately, he added, the EPA still had tolerances established for pyridate in mint based on research conducted in the 1990s. That, Salisbury said, was a key to obtaining the full federal registration, given that establishing tolerances for a pesticide is an expensive and time-consuming effort.

EPA still needed environmental fate studies, however, to obtain new data on how the chemical behaves and breaks down in the environment, and Belchim stepped up to get that work done, Salisbury said.

“They invested the money to get those studies done and they submitted that data to EPA and satisfied that requirement,” Salisbury said.

Tough offers several beneficial uses for growers, Salisbury said, in large part because it is safe to apply over the top of actively growing mint and controls terbacyl resistant pigweed as well as kochia, two problematic weeds in mint production.

“For keeping your crop clean, turning out a quality oil, nothing compares to this product,” Salisbury said. “It opens the door to improved quality production.”

Rick Boydston, retired USDA Agricultural Research Service weed scientist, who worked with Salisbury on obtaining the Section 18 registrations early in the process, characterized the product as “one of the safest chemistries out there to put on post-emergence for broadleaf weed control in mint.

“It has really good crop safety, and for later season, for double-cut mint, it is a really important tool for pigweed control,” said Boydston, who was based in Prosser, Washington. “We get a lot of pigweed germinating in that second flush of mint after the first harvest. We need a tool in there to take those later emerging broadleaf weeds out.”

Salisbury said the federal IR-4 program has agreed to work on getting the product's pre-harvest interval shrunk from the current PHI of 49 days to 30 days, which would be a better fit for growers hoping to use it between cuts in double-cut mint.

Also, he said, the Canadian agency responsible for regulating pesticide use, Pest Management Regulatory Agency, is collaborating with IR-4 on getting Tough registered for use on mint in Canada.

“That will be really good news for our Canadian members,” Salisbury said.

Salisbury said that Tough has been on his radar since 2014 when he interviewed for the MIRC position he currently holds. “When I was

interviewed for this job, one of the questions I was asked by a search committee member was whether I saw a way to bring back pyridate,” he said. “It was clear to me early on that this was a priority for the industry. It’s exciting to get this done.”

Despite the fact there is no documented evidence of herbicide

resistance to pyridate, Salisbury cautioned growers from over-using it without good weed management strategies and in conjunction with an effective and complete herbicide program.

“With any herbicide, developing resistance is always a concern,” Salisbury said, “and because this is the

only game in town for post-emergence control of some of these weeds, we could see that pressure develop. So, we have to be smart about where we are using it and how we are using it. That is just being good stewards of a product that is very effective. This is a good one, and we want to keep it around for a long time.”

IR-4 Continues Gaining Pesticide Registrations During Move

The IR-4 Project has maintained its level of pesticide registrations for minor crops in 2020, despite staff changes and moving its headquarters from Rutgers University to North Carolina State University.

“We have about 520 new registrations approved by EPA this calendar year,” said IR-4 Project Executive Director Jerry Baron in an interview in late-October. “We expect to eventually be at our typical average, which is about 700, by the end of the calendar year.”

Baron said the project is about halfway through moving its headquarters from New Brunswick to Raleigh, a transition expected to take two years.

“We kept the long transition period so that we would be able to keep things operational during the time frame when we were locating from Rutgers down to North Carolina State University,” Baron said.

“As far as our field program goes, we hardly missed a beat in 2020,” he added, “because all of our field sites were defined as essential, which means our researchers could continue to go out there and do the work that they are being asked to do.”

The project, which works to register pesticides for minor crops such as mint, plans to complete its move by September 30 of 2021. It started the transition October of 2019, although Baron said the move wasn’t really kicked off until January 1 of 2020.

Adding to difficulties of making the move has been the presence of the COVID-19 pandemic, Baron said, which has added to the difficulties of bringing on new staff.

“People are being hired without the benefit of a face-to-face interview,” Baron said. “Everything is being done over Zoom. There have been cases where people have been here three or four weeks before I ever see them in person. That is quite interesting and something I am not used to.”

Baron added that North Carolina State “has been supportive and helpful in any way they can possibly be, which has made it so much easier to do the recruiting and the hiring.

“But it has been challenging,” he said. “It also has been challenging in the sense that in a couple of cases, some of the talent we had hoped to recruit have backed out because of not being comfortable with making the move

during this pandemic, and I fully understand that.”

On the plus side, the IR-4 move comes at a time when several key personnel were at or nearing retirement, a fact that can minimize the number of personnel needing to relocate.

“There is never a good time for something like this,” Baron said. “But, if you have to say what is the best time with the least impact, this would have been it, because there were so many people who were near retirement.”

The project currently has about one-third of its staff in place at NCSU, Baron said. When fully staffed, it will operate with a staff of 25. In addition to the eight new hires, he expects a half-dozen or so staff to move from New Jersey to the new site at some point before next fall.

Baron identified the submissions of reports and data as the IR-4 Project’s highest priority. He said that for the most part, the project was able to do that in 2020.

“In a lot of ways, we were able to keep everything pretty much afloat this year,” he said. “That doesn’t mean we were at 100 percent capacity. It means the most important stuff got done.”

Mint Genome Subject of National Science Foundation-Backed Research

A five-year research project funded by the National Science Foundation's Plant Genome Research Program has provided more information on the mint family and its 6,000 different species.

The project, which is now wrapping up, focused on how the mint family's chemical diversity evolved over time in the hopes of better understanding how it produces the compounds that set it apart from other plant families.

Plants in the mint family include peppermint and spearmint, catnip, lavender, rosemary, culinary herbs such as basil, oregano and thyme and even the wood teak.

"We are interested in why in this group of plant species there is so much diversity," said Robin Buell, a professor of plant biology at Michigan State University, who is leading the project.

"In the human genome, there are only 22,000 genes. But in plants, you can have 30,000, 40,000, 50,000 or 60,000 genes because plants duplicate their whole genome quite often."

Robin Buell,
Professor of plant biology
Michigan State University

The project involved an initial screening of 48 different species in the mint family, including peppermint and spearmint, and paring that down to 14 to study in detail. Researchers moved away from studying



peppermint and spearmint because Kelly Vining, an assistant professor in crop plant genomics at Oregon State University, and Markus Lange, a biological chemist at Washington State University, already were genetically analyzing those plants.

"As Kelly and Markus were focused on peppermint and spearmint, we elected to work on other mints species, such as catnip, lavender, basil and rosemary," Buell said.

Mint is unusual because of its diversity and the chemicals it produces, Buell said, chemicals that provide its distinct fragrance, among other characteristics. Through studying the plant's DNA code, or its genetic structure, the researchers hoped to gain a better understanding of how the plant makes the compounds, she said.

"One compound we focused on was nepetalactone in catnip," Buell said. "That is the compound in catnip that gets cats very excited. We investigated

the enzymes responsible for making that. Then we asked, why out of all the plants in the mint family does only catnip produce those compounds?"

One way the mint family has created such diversity is through genetic duplication, Buell said.

"In the human genome, there are only 22,000 genes. But in plants, you can have 30,000, 40,000, 50,000 or 60,000 genes because plants duplicate their whole genome quite often," she said. "So that is how some of the compounds essential to the flavor and aroma of culinary herbs came about."

Buell sees several practical uses that could come out of the research, including use as a breeding tool.

Asked whether the research could directly benefit the peppermint and spearmint oil industries, she said, "It can't hurt. The more you know about things that are related to what you want to do, the more helpful it can be."

Chairman's Report

Dana Wendel, Chairman of the Board

As we look back on 2020, whether you are a grower, a manufacturer, or involved in our industry in some other capacity, it is obviously a year for the books. There was the election, the historic wildfires we suffered out West, and first and foremost, there was COVID and the tremendous impacts that had on our industry.

But through it all, our industry continued to move forward, and the MIRC was no exception. Because of that, I'd like to extend my compliments to Bryan Ostlund, Shawn Anderson and Steve Salisbury and others in the MIRC administrative office for keeping things moving and addressing all of the nuances that the COVID disruption has brought our way.

MIRC administration has spent a tremendous amount of time working with researchers and monitoring their progress to ensure that, when possible, work is getting done. We realize there are instances with research where certain things may not be getting done this year, and we understand that those circumstances will arise. But we need to make sure that our research dollars are well spent. To that end, our organization is tracking and coordinating with all parties to ensure that everything is moving forward in a professional manner.

I'd also like to thank Steve Salisbury and others for working to ensure that mint producers are eligible for government support for economic hardships suffered during COVID through the USDA's Coronavirus Food Assistance Program. Their work was

invaluable in ensuring our growers are eligible to get some financial relief to help withstand the price drop that has occurred because of COVID.

I'd also like to thank my fellow members of our Executive Committee, Vice Chair Karla Farina and Secretary Treasurer Jeff Johnson, for their help in keeping the MIRC on track in these uncertain times. Through conference calls and Zoom meetings, I believe we have helped ensure that the MIRC is meeting our challenges and heading in the right direction.

Obviously, it is a shame that our 2021 meeting in San Diego had to be cancelled, but as we discussed in a previous newsletter, that will all move forward in 2022, and as we move into 2021 and see changes in the health community, hopefully we can get some of these issues behind us.

One of the biggest drawbacks to the impacts of COVID has been restrictions on travel and meetings that government officials and others have worked under for the past nine months. This has made it virtually impossible for MIRC staff and industry leaders to meet in person with key government personnel from organizations like the IR-4 Program, the National Institute of Food and Agriculture (NIFA), the USDA Agricultural Research Service (ARS), the EPA registration staff and the USDA's Office of Pest Management Policy (OPMP).

Particularly with the moves of the IR-4 Program from New Jersey to North

Carolina and NIFA from our nation's capital to Kansas City, and the subsequent personnel changes those two organizations

have undergone over the past twelve months, not being able to travel and meet their leadership in person has been a setback.

We've obviously spent years building our relationships with these organizations, and we have some very solid ties with people like Jerry Baron, executive director of the IR-4 Program, so not being able to see them for one year isn't the end of the world, but we certainly look forward to getting back to be able to visit with these groups in person.

Speaking of the IR-4 Program, I would like to compliment them for continuing to meet their goals of obtaining pesticide registrations for minor crops in the midst of their move and despite the personnel changes they've undergone. From what I understand, they've managed to secure about the same number of new pesticide registrations in 2020 that they do in a normal year, a commendable feat given their situation.

Finally, I'd like to wish all of our members a happy Holiday Season. And let's hope 2021 is a big improvement to 2020.



Dana Wendel

Research & Regulatory Update

Steve Salisbury

As we wrap up this very challenging year of 2020, we still find ourselves up to our ears in challenges and frustrations that have been thrown our way all year. To say the least, we are all looking for some positive news. So, with that I have some good news to report in this edition.

September 8, 2020 was a bright day for mint. That was the day that the EPA approved the registration of Tough herbicide (pyridate). This has been a long time coming and is a welcomed resurrection of a valuable tool that was lost back in 2006.

What a story! The herbicide's registration was voluntarily cancelled by the registrant leaving mint producers in the dark without the herbicide's post-emergent weed control capabilities for the last 14 years. It was seemingly dead-in-the-water with no hope for a resurrection. Then, along comes Belchim Crop Protection, which was able to become the new suitor for Tough. Belchim picked up the pieces, put in the work and became the heroes. In today's crop protection world and regulatory scene, this is an uncommon objective and possibly a less probable outcome. For that we are very grateful.

This has truly been an industry-wide effort demonstrating the value of all parties involved including the growers, mint buyers, federal and state agencies, Belchim Crop Protection,

weed scientists in several states and the MIRC. A huge "Thank you" to everyone who helped make this possible. This could not have been accomplished without everyone's support.

Belchim has been diligently working at getting the new mint label approved in each state. As of now, there are only a few states left to approve. For the most part, most everyone should have a label in place for the 2021 growing season. Feel free to contact me to get the most up-to-date list of states with approved labels.

The new label will allow for a maximum of two applications per season at 24.0 fl. oz. per acre per application. This includes both single and double-cut mint and includes a post-harvest option as one of the two applications per season. The 49-day pre-harvest interval (PHI) is still in effect, so be aware of that. Thanks to your feedback, we have initiated a project through IR-4 to shorten the PHI to 30 days.

As a result of that IR-4 project, it appears that pyridate will also be considered for registration in Canada as the Canadian Pest Management Regulatory Agency is involved in the PHI residue research with IR-4. So, even our member growers in Canada should eventually end up with a new label for use there, too. More good news!

Keep in mind that Tough is a contact herbicide, and it is important to maximize the coverage to optimize the weed control. More

gallage is important. The label recommends 20-30 gallons per acre with a minimum of 15 gallons per acre. It is also recommended to use an adjuvant to improve performance. The label lists your options, but it is worth noting that the weed scientists had the best luck with MSO in trials evaluating Tough performance.

We are grateful to have Tough back in the toolbox, and with the current PHI research work through IR-4, we continue to work to improve the label. We encourage you to make it part of your herbicide program where needed.

To add to the positive news, I am happy to report that we were able to garner support for Sharpen herbicide (saflufenacil) from BASF to officially begin our pursuit for a label. I know many of you have been patiently waiting for this to get started as this herbicide will have a great fit during dormancy or just prior to dormancy break. Our MIRC weed science project has been diligently generating the data to support our request for the label. The IR-4 residue research will begin 2021 and that process has begun. If all goes well, in a few years we'll have a new label for Sharpen in mint. MIRC trial results look very good



Steve Salisbury

MIRC is now on Twitter

Follow us @MIRCtoday



and I encourage you to review the performance data from your region.

Lastly, I will finish with another piece of good news for mint. As I reported in the last newsletter, there have been a lot of efforts made regarding mint's eligibility in the USDA's Coronavirus Food Assistance Program (CFAP). While we were able to become officially eligible for CFAP there was a great deal of confusion that ensued. The problem was a misunderstanding between mint for oil and fresh market mint. To make a long story short, discussions were needed to determine how to assign a "value to the oil standing in the field." Yes, that's a bit of a head-scratcher

but for the CFAP we understood the reasoning and the need to provide more information to address the question.

Due to the program's directives, the USDA considers your harvest distillation step as a value-added step and they needed to account for this when calculating the assistance that would be available to you. The USDA determined a standardized distillation cost they will use across the board. Therefore, they will use a factor of 93.1 percent for peppermint and 92.1 percent for spearmint to be applied to the sales of mint oil to reach the raw farm-gate value.

By the time this newsletter arrives the deadline to apply will have passed unless the USDA announces another extension. Stay tuned, you never know what's next. We hope that you are able to utilize this program to help your farms through this challenging time. Thank you very much to Shane Johnson of the Washington Mint Commission for working together along with many growers and the regional FSA offices through the confusion and coming to a meaningful solution.

I wish you all the best for a better 2021.

SAVE THE DATE 2022

Mint Industry Research Council

Annual Meeting
San Diego
CALIFORNIA

JANUARY 26-27, 2022

KONA KAI RESORT & SPA
www.resortkonakai.com

The meeting will feature two days of invited guest speakers from around the country, in addition to industry research reports and updates.

The meeting comes to a close with a Thursday evening industry reception, which allows the opportunity to socialize in a relaxed and enjoyable atmosphere.





Mint Industry Research Council

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