

**THE NORTH DAKOTA CROP PROTECTION PRODUCT HARMONIZATION  
AND REGISTRATION BOARD**

**MINUTES OF APRIL 29, 2020**

The North Dakota Crop Protection Product Harmonization and Registration Board met on April 29, 2020 via conference call.

Chairman Jeff Topp called the meeting to order at 1:07 p.m. Board members present via telephone included: Chairman Jeff Topp, North Dakota Agriculture Commissioner Doug Goehring, Senator Terry Wanzek, Representative Marvin Nelson, Representative Mike Brandenburg, Terry Weckerly, Troy Bassingthwaite, Stan Buxa, Dr. Greg Lardy, and Eric Lahlum.

Non-board members present for the meeting via telephone included: Tom Bodine (NDDA), Jerry Sauter (NDDA), Faye Wangen (NDDA), Dr. Michael Wunsch – NDSU, Dr. Brian Jenks – NDSU, Dr. Kirk Howatt, NDSU, Dr. Venkata Chapara – NDSU, Dr. Harlene Hatterman-Valenti, NDSU, Joseph Mettler and Dan Wogsland, ND Grain Growers Association.

**3. Approval of Minutes.** Wanzek moved to approve the minutes of the board meeting on November 26, 2019. The motion was seconded by Commissioner Goehring. Motion carried.

**4. Minor Use Pesticide Fund Grant Budget Report.** Sauter provided a report on the minor use fund budget. There was a \$78,579.67 carryover from the 2017-2019 biennium. The legislature appropriated \$325,00 for the 2019-2021 biennium for a total of \$403,579.67. Payments made to date in the 2019-2021 biennium were \$17,905.00. Outstanding expenditures are \$95,179.50 for total obligations of \$113,084.50. Net funds available are \$290,495.17. Commissioner Goehring moved to receive and file the report. The motion was seconded by Weckerly. Motion carried.

**5. Pesticide Harmonization Grant Budget Report.** Sauter provided a report on the pesticide harmonization grant fund which pays for Board operating expenses and Harmonization grants. Legislative appropriation for the 2019-2021 biennium is \$75,000. Payments for expenses so far total \$129.23 and the Board approved a grant to ND Grain Growers last meeting for \$39,133.13 leaving a net fund balance of \$35,737.64. Commissioner Goehring moved to receive and file the report. The motion was seconded by Brandenburg. Motion carried.

**6. Reports on Previously Funded Minor Use Fund Projects.**

- I. Optimizing fungicide application methods and deployment of organosilicone surfactants for improved white mold management in dry beans: Dr. Michael Wunsch, NDSU.

**Conclusion:**

- Applying fungicides with medium droplets (black beans) or medium to coarse droplets (navy and kidney beans) optimized white mold management.
- Fine droplets, which optimize fungicide performance against foliar diseases that develop in the upper crop canopy, lack the velocity to penetrate dense canopies and conferred sub-optimal control of white mold.

- Applying fungicides with excessively coarse droplets, which have the velocity to penetrate the crop canopy but result in poor fungicide coverage, was also associated with reduced white mold control and dry bean yield.

Discussion held on droplet size, vehicle speed during application, need for appropriate tips that impact yield.

II. Optimizing the deployment of fungicide seed treatments relative to field pea and lentil planting date: Dr Michael Wunsch, NDSU

**Conclusion:**

- The yield gain conferred by treating peas with ObVius was highest when peas were planted early.
- The yield gain conferred by treating peas with Intego Solo was highest when peas were planted late.
- The yield gain conferred by treating peas with Intego Solo was highest when peas were planted into heavy small grain residues.
- In fields with natural root pressure, differences across commercial fungicide seed treatment fungicide premix products with activity against Fusarium, Rhizoctonia and Pythium root rots were relatively small.
- Laboratory diagnostic testing conducted with DNA-based methods and traditional microbiology confirmed that the pathogens causing Fusarium and Aphanomyces root rot were associated with the root rot symptoms observed in the planting studies conducted in fields with natural root rot pressure.
- Lentils did not respond as strongly as peas to fungicide seed treatment.

III. Developing strategies for the management of QoI-resistant ascochyta blight in field peas: Dr. Michael Wunsch, NDSU.

**Conclusion:**

- Applying fungicides with fine droplets optimized Ascochyta management and field pea agronomic performance under Ascochyta pressure.
- Applying fungicides with medium droplets optimized anthracnose and white mold management in lentils.
- When applied as two sequential applications, QoI fungicides exhibited poor efficacy against Ascochyta blight of field peas.

IV. Optimizing the deployment of tank mixes with chlorothalonil for management of Ascochyta blight in chickpeas: Dr. Michael Wunsch, NDSU.

**Conclusion:**

- Across 11 studies conducted over 4 years, tank-mixing Bravo WeatherStick (1.38 pt/ac) and Proline (5.0 or 5.7 fl oz/ac) consistently improved Ascochyta management relative to Proline applied alone.
- Increasing the application rate of Bravo WeatherStick from 1.38 pt/ac to 2.0 may increase the efficacy of tank-mixes with Proline (5.0 or 5.7 fl oz/ac).

- Provysol, the new triazole fungicide from ABS, and associated premix fungicides showed strong increases in efficacy when tank-mixed with Bravo WeatherStick.
- Tank-mixing Bravo WE with the SDHI fungicides Priaxor and Endura improved Ascochyta management under high disease pressure, but tank-mixing Bravo WS with Priaxor has not provided consistent improvements in Ascochyta management.
- Tank-mixing Bravo WS with Miravis TOP (a premix of SDHI and triazole active ingredients) improved Ascochyta management across trials.
- Fine droplets optimized fungicide performance against Ascochyta blight in chickpeas, minimizing disease and maximizing chickpea yield.
- The impact of droplet size on was similar across fungicides tested.
- Increased spray volume sharply improved Ascochyta control and chickpea yield across both fungicides tested and both chickpea varieties.

Discussion held on interaction. Because different studies were done with different varieties there was no interaction with fungicides. They haven't done a lot of testing done with different brands of chlorothalonil to determine if Bravo WeatherStick or other generic brands are more effective but could be included in the November grant where there are matching funds from Pulse Growers and private industry. Lower disease pressure resulted with the highest yield. One factor that may have impacted the study in the non-Carrington sites they tend to have some level of botrytis gray mold pressure in the chickpeas. Botrytis is difficult to quantify visually but causes pod abortion. It's believed the tank mix improved the efficacy of botrytis. If this is the case Botrytis is a more severe disease.

V. Tame oat tolerance to soil-applied herbicides: Dr. Brian Jenks.

Very dry conditions hindered herbicide activation and oat growth each year. Some herbicides have appeared safer than others, but we can't be completely confident with the crop safety data in low rainfall situations.

VI. Flax tolerance to soil-applied and post-emergence herbicides: Dr. Brian Jenks, NDSU.

Drought conditions impacted crop emergence, crop growth, and herbicide activation of soil-applied herbicides.

**Conclusion:**

- Minot: Armezon, Basagran, and Basagran+Raptor caused similar or less flax injury compared to Bison. Raptor applied alone caused severe injury. None of the treatments differed in yield.
- Hettinger: All treatments caused slight flax injury but were generally similar to Bison. Yields in 2019 are not reliable due to excessive variability (high CV).
- Carrington: Flax injury was similar to Minot and Carrington. More injury from Raptor compared to other treatments, but injury subsided over time. There were no differences in yield between all treatments.

Discussed use of dicamba with diflufenzopyr for fall control and carryover. This has not been tested. Talked about different dosages of dicamba used and that those dosages may work with diflufenzopyr. Dicamba probably works best with horseweed which is found throughout the

state. The horseweed rosettes are really the target and they generally germinate the last two weeks in September.

VII. Crop tolerance to fall-applied herbicides: Dr. Brian Jenks, NDSU.

**Conclusion:**

- Little to no injury to sunflower from fall-applied 2,4-D or dicamba at either Minot or Hettinger – no reduction in crop height or stand.
- Of the crops evaluated, lentil was most sensitive to carryover from fall application, especially to dicamba.
- Spring applications at Minot resulted in more injury than fall application, especially in lentil.
- May application of dicamba at 2 oz/A and 2,4-D at 2 pt/A reduced lentil height, but not sunflower or field pea
- Results indicate that fall applications of 2,4\_D and dicamba may be safe prior to planting sunflower and field pea, but there may be some risk for lentil.

Discussion regarding the post-emergence use of Prowl on Kochia and flax that has some residual. Flax is very tolerant of Spartan. Jenks has not tested flax in early post emergence stage.

VIII. Herbicide use in industrial hemp (*Cannabis sativa*) production: Dr. Kirk Howatt, NDSU.

**Conclusion:**

- Pendimethalin, trifluralin, pyroxasulfone and quinclorac have been identified as pre-emergence herbicides for continued registrant evaluation for registration in hemp along with post-emergence herbicides clopyralid, bromoxynil, atrazine, imazamox, and quinclorac.

Motion made by Wanzek to accept these final reports and send payment for funds set aside. Seconded by Brandenburg. Motion carried.

**7. Consideration of New Minor Use Fund Requests**

- I. Optimizing the deployment of fungicide seed treatments in field peas relative to crop rotation interval and planting date: Dr. Michael Wunsch, NDSU.

This project seeks to develop rigorous guidelines on the profitable use of seed treatments targeting *Fusarium* and *Aphanomyces* root rots relative to planting date and soil temperatures. This request is for continuation of a previously funded request.

Funds requested: \$23,590.00

Matching funds: \$29,000 Northern Pulse Growers Association, BASF and Syngenta

- II. Optimizing fungicide spray droplet size and spray volume for improved white mold management in dry beans: Dr. Michael Wunsch, NDSU.

This project seeks to improve the control of white mold in dry beans by (1) optimizing spray droplet size for maximum fungicide deposition within the crop canopy, improved Sclerotinia disease control, and improved black and navy bean yield and quality under white mold disease pressure and (2) quantifying the response to fungicide spray volume for control of white mold in pinto beans. This request is for continuation of a previously funded request.

Funding requested: \$32,111.00

Matching funds: \$32,111 Northarvest

III. Tame oat tolerance to soil-applied herbicides: Dr. Brian Jenks, NDSU.

This project will evaluate oat tolerance to several soil-applied herbicides applied either preemergence or early postemergence. This request is for continuation of a previously funded request.

Funding requested: \$10,000.00

Matching fund: None

IV. Flax tolerance to soil-applied and postemergence herbicides: Dr. Brian Jenks, NDSU

This project is to evaluate flax tolerance to preemergence (PRE) and postemergence (POST) herbicides. The objective is to find herbicides that are safe on flax but will control redroot pigweed and/or annual grasses. This request is for continuation of a previously funded request.

Funding requested: \$15,000.00

Matching Funds: AmeriFlax: \$7,500.00

V. Crop tolerance to fall applied herbicides: Dr. Brian Jenks, NDSU.

In this study, we will determine if fall-applied 2,4-D and dicamba will injure spring-planted sunflower, dry pea, and lentil. This request is for continuation of a previously funded request.

Funding requested: \$5,000.00

Matching funds: \$5,000.00 each from Northern Pulse Growers and National Sunflower Association.

VI. Evaluation of soil amendments at various doses to manage club root on canola in field: Dr. Venkataramana Chapara, NDSU.

Current proposed research will help to determine the exact dose (rate) of the soil amendment to be applied in fields based on buffer pH of soil to manage clubroot.

Funding requested: \$11,145.00

Matching funds: \$17,639 from NCGA

VII. Herbicide use in industrial hemp: Dr. Kirk Howatt, NDSU.

The proposed study is to identify pre-plant and post-emergence herbicides to be further studied with pesticide registrants to develop registered herbicides for use in Industrial Hemp. This request is for continuation of a previously funded request.

Funding requested: \$39,334.00

Matching funds: None. \$800.00 seed donated.

- VIII. Weed control in onion: using an integrated system for early season control: Dr. Harlene Hatterman-Valenti, NDSU.

The objective of this project is to determine the appropriate herbicide applications prior to onion seedling emergence that will keep the field generally weed-free until the onion reaches the two-true leaf stage, when numerous products are available.

Funding requested: \$35,067.00

Matching funds: None

#### **Funding Requests and Roll Call Votes**

Discussion regarding funds available - \$290,495.17 until end of biennium with two more meetings left. The funding requested today is \$171,247.00 leaving approximately \$120,000.

Evaluation of soil amendments at various doses to manage club root on canola in field: Dr. Venkataramana Chapara, NDSU.

Funding requested: \$11,145.00

Motion made by Nelson not to fund the proposal. Seconded by Wanzek. Discussion on the high cost of application, disease found mainly in Cavalier county and not statewide, and current work being done in Canada. Motion carried after a roll call vote.

Weed control in onion: using an integrated system for early season control: Dr. Harlene Hatterman-Valenti, NDSU.

Funding requested: \$35,067.00

Motion made by Wanzek to fund the project for one year for \$16,850.00 pay for this funding. Seconded by Nelson. She is encouraged to seek block grant if possible. Motion carried after a roll call vote.

Herbicide use in industrial hemp: Dr. Kirk Howatt, NDSU.

Funding requested: \$39,334.00

Motion made by Wanzek to approve half the funding request in the amount of \$19,677.00 and Dr. Howatt can decide if the study will focus on pre-emergence or post-emergence testing. Dr. Howatt could return at the fall meeting to request additional funding after he talked with the

industry about possible matching funds. Seconded by Brandenburg. Motion carried after a roll call vote.

Buxa made a motion to approve the three proposals by Dr. Jenks fully and the two proposals by Dr. Wunsch at the following reductions: \$23,590.00 request be reduced to \$20,000 and the \$32,000 request be reduced to \$25,000. Seconded by Weckerly. Dr Wunsch says the seed treatment in field peas will be the last year for another couple of years when crop rotations will be done. This is labor intensive work as each individual plant needs to be assessed for disease. This will be the last year of the white mold management using droplet size study. White mold is the main disease in dry beans. Scope of work will need to be reduced if funded are reduced. Motion failed after a roll call vote.

Optimizing the deployment of fungicide seed treatments in field peas relative to crop rotation interval and planting date: Dr. Michael Wunsch, NDSU.

Funds requested: \$23,590.00

Motion made by Bodine (Goehring left meeting and appointed Bodine to fill in) to approve the funding request of \$23,590. Seconded by Wanzek. Motion carried after a roll call vote.

Optimizing fungicide spray droplet size and spray volume for improved white mold management in dry beans: Dr. Michael Wunsch, NDSU.

Funding requested: \$32,111.00

Motion made by Wanzek to approve the funding request of \$32,111.00. Seconded by Bodine. Motion carried after a roll call vote.

Tame oat tolerance to soil-applied herbicides: Dr. Brian Jenks, NDSU.

Funding requested: \$10,000.00

Motion made by Weckerly not to fund this project. Not seconded. Motion failed.

Motion made by Nelson to approve the funding request of \$10,000.00. Seconded by Wanzek. Motion carried after a roll call vote.

Flax tolerance to soil-applied and postemergence herbicides: Dr. Brian Jenks, NDSU

Funding requested: \$15,000.00

Motion made by Buxa to approve the funding request for \$15,000. Seconded by Weckerly. Motion carried after a roll call vote.

Crop tolerance to fall applied herbicides: Dr. Brian Jenks, NDSU.

Funding requested: \$5,000.00

Motion made by Nelson to approve the funding request of \$5,000.00. Seconded by Wanzek.  
Motion carried after a roll call vote.

Dan Wogsland, ND Grain Growers Association reported that the 2020 E-Tour won't be held due to COVID-19. They are working with EPA Region 8 to put together a mini tour which would be based out of Bismarck. Appreciation of support was expressed.

IX. Meeting adjourned at 3:52 p.m.