The North Dakota Crop Protection Harmonization and Registration Board

Minutes of April 18, 2019

A copy of the agenda was posted on the board by the elevators and outside the conference room.

The North Dakota Crop Protection Harmonization and Registration Board met on April 18, 2019 in the Sixth Floor Conference Room of the State Capitol in Bismarck.

Chairman Jeff Topp called the meeting to order at 1:00 p.m. Board members in attendance included: Chairman Jeff Topp, North Dakota Agriculture Commissioner Doug Goehring, Senator Terry Wanzek, Representative Marvin Nelson, Representative Mike Brandenburg, Stan Buxa, and Dr. Greg Lardy.

Non-board members present for the meeting in person or via telephone included: Jerry Sauter (NDDA), Faye Wangen (NDDA), Dr. Luis Del Rio Mendoza – NDSU, Dr. Venkata Chapara – NDSU, Dr. Brian Jenks – NDSU, Dr. Michael Wunsch – NDSU, Dr. Kirk Howatt – NDSU, and Don Wogsland – NDGGA.

3. **Approval of Minutes.** Buxa moved to approve the minutes of the board meeting on December 4, 2018. The motion was seconded by Wanzek. All voted in favor. Motion carried.

4. **Minor Use Pesticide Fund Grant Budget Report.** Sauter provided a report on minor use fund budget. Total obligations for the 2017-2019 biennium were $223,181.09 leaving $117,549.26 net in minor use fund dollars available.

5. **Pesticide Harmonization Grant Budget Report.** Sauter provided a report on the pesticide harmonization grant fund which pays for Board operating expenses and is used for grain growers' grants. Total operating expenses since last meeting were $751.47 with $11,630.75 funds available. The binders need to be charged to this yet. There was a missed bill that was paid last time of $15,730.35 for the E-Tour that was found in audit.

Dan Wogsland – NDGGA – provided an update of the upcoming Grain Growers E-Tour scheduled in Fargo June 24-28, 2019.

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

I. Evaluation of Seed Treatments and Fungicide Delivery Systems for Management of Blackleg of Canola: Dr. Luis Del Rio Mendoza, NDSU

Dr. Mendoza gave his report over the phone. After a two-year study results suggest that under very high disease pressure, seed treatments alone are not enough to manage blackleg. Under more moderate disease pressure, some

treatments e.g. Obvius or Helix Vibrance may be more effective in lowering disease. Trials on the development of slow-release formulation were conducted on greenhouse trials. Results on seedlings to be recorded on April 18 and adult plants sometime in the second half of May.

Discussion held on seed to pellet ratios and seed inoculate method that is nontoxic. BASF is coating the seed, but that is not enough. There needs to be continuous release for protection.

II. Management of Sclerotinia Head Rot in Sunflowers Using Foliar Application of Clonostachys Rosae Strain CR-7: Dr. Venkata Chapara, NDSU

The proposed research did not yield significant differences in terms of disease incidence and control. Research is being stopped. The project investigator and co-pi decided not to request funding for second year study. Funds were received from Crop HARM board and BVT technologies.

III. Tame Oat Tolerance to Soil Applied Herbicides: Dr. Brian Jenks, NDSU.

Dr. Jenks gave the final report via the telephone. There is no known postemergence herbicides that will control grasses yet be safe on oat. Certain “soil-applied” herbicides were applied preemergence barley and caused slight to moderate crop injury, but most didn’t impact barley yield. Not confident in results due to lack rain. May be opportunities for fungicides to work when there is normal rainfall so propose to do the study again.

IV. Development of Ethaboxam as a Seed Treatment for Management of Aphanomyces Root Rot in Field Peas: Dr. Michael Wunsch, NDSU.

Ethaboxam, the active ingredient in Intego Solo, has activity against Aphanomyces root rot. Funding was provided by ND Crop HARM board, the Northern Pulse Growers Association, the USDA Specialty Crops Block Grant Program, and Valent USA. Tanks mixes used will be labeled in 2019 and be commercially available in 2020. The absence of differences in disease-causing ability would suggest that the pyraclostrobin-insensitive isolates will remain within pathogen populations even in the absence of the use of QoI fungicides.

Need to seed peas early. It’s free. Seed peas before you plant wheat.

V. Evaluation of Fungicides for Management of QoI-Resitant Ascochyta Blight in Field Peas and Chickpeas: Dr. Michael Wunsch, NDSU.

The project was funded by ND Crop HARM board, BASF Corporation, and Syngenta CropScience.

No products are effective under high pressure disease. Using a tax mix of Proline and Bravo (it's cheap) increased yield and increases efficacy with Proline under high pressure disease.

Management of White Mold in Dry Beans with Peroxide-Based Fungicides, Adjuvants, and Improved Application Methods: Dr. Michael Wunsch, NDSU.

White mold control and dry bean yield were maximized with fungicides applied with spray droplets and using drop nozzles. Medium and medium-coarse droplets were more effective. There is no extra cost based on droplet size.

Adding Winfield adjuvants 'Preference' and 'Silkin' to Topsin sharply improved efficacy. When Peroxide-based product, OxiDate, was added to Topsin fungicide efficacy did not improve.

This project was funded by ND Crop HARM Board and Northarvest Bean Growers Association.

VI. Evaluation of Prothiconazole as a Seed Treatment of Managing Fusarium Root Rot in Field Peas and Lentils: Dr. Michael Wunsch, NDSU.
Project was funded by ND Crop HARM Board, Bayer CropScience, and Northern Pulse Growers Association.

Planting early is effective because this is a warm soil temperature disease. It was a wash using the seed treatment.

VII. Evaluation of seed treatment with streptomycin for management of seed-borne bacterial blight in field peas: Dr Michael Wunsch, NDSU.

Project funded by ND Crop HARM Board and Northern Pulse Growers Association. Planting with elevated seed-borne Pseudomonas syringae pv. Pisi increased bacterial blight severity at the end of the season and reduced yield. Antibiotic streptomycin seed treatment reduced yield impact of planting diseased seed when earlier simulated severe weather occurred. Affected seeds exposed to severe weather, resulted in increased bacterial blight and modest reduction in yield. Seed treatment with streptomycin had little impact on these plants. An average of 4.33 days after bloom initiation with seeds with elevated seed-born P. Syringe there was no impact on severity of bacterial blight or field pea yield. Foliar sprays of peroxide-based products had no impact on bacterial blight severity or field pea yield.

Project is finished. Infected seed lots only mattered when there was early infection in the crop and severe weather during vegetative growth. If infection occurred close to bloom the infection didn't matter. Streptomycin was effective.

Nufarm is interested in pursuing this. Determined that this did help and when it could help. Seed treatment beneficial after severe weather when it was needed.

VIII. Optimizing fungicide application strategies for management of white mold in lentils: Dr. Michael Wunsch, NDSU.

Project was funded by ND Crop HARM Board and Northern Pulse Growers Association. The project was unsuccessful due to the influence of anthracnose, a foliar disease caused by the fungal pathogen Colletotrichum spp. Headline only suppressed anthracnose, reducing the speed with which it killed the lentils. The fungicide applied was Endura which has no efficacy against anthracnose.

Doing follow up work on this project.

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

I. Evaluation of Soil Amendments at Various Doses to Manage Clubroot on Canola in Field Conditions: Dr. Venkata Chapara, NDSU.

Funds requested: $11,145 for a one-year project which is a continuation of the three soil amendments that work. The objective of the project is to research these products for dose determination to determine lower costs to growers to manage clubroot and to communicate results to the public. A five-year crop rotation is recommended to get control. Wood ash, lime, and beet lime are working well. Requested $16,000 from North Dakota Canola Growers.

II. Optimizing the Deployment of Fungicide Seed Treatments Relative to Field Pea and Lentil Planting Date: Dr. Michael Wunsch, NDSU.

Funds requested: $54,840. Matching funds: Pulse Growers - $19,000, Valent - $30,000, Syngenta, Bayer, and Valent- $15,000. Intended results: Quantify the efficacy of Intego Solo and five commercial fungicide seed treatment pre-mixes in peas and lentils seeded with natural Fusarium and Aphanomyces root rot pressure; Quantify the efficacy of five commercial fungicide seed treatment pre-mixes against Fusarium root rot; Quantify effectiveness of low vs. high application rates of ethaboxam; Generate rigorous usage recommendations on the profit-maximizing use of fungicide seed treatments relative to planting date and soil temperature for management of Fusarium and Aphanomyces root rot in peas and lentils.

Discussion on this is an offshoot of a previous study where no fungicide was needed. Producers were excited about this study. Companies are providing the product and funding for additional studies. Valent is funding $30,000 for ethaboxam.

III. Developing Strategies for the Management of QoI-Resistant Asochyta Blight in Field Peas: Dr. Michael Wunsch, NDSU.

Funds requested: $12,000. Parallel fungicide efficacy research is funded by the BASF Corporation evaluating new experimental fungicide active ingredients for the management of QoI-resistant Aschchyta in field peas. This project will quantify the impact of spray droplet size on the efficacy of representative SDHI and DMI fungicides for management of Ascochyta blight in field peas. Nozzles from two different manufacturers will be evaluated, with testing conducted on two different field pea varieties.

BASF is providing $15,000 in funding for other strategies – not droplet size. Discussion on researchers meet with EPA because this is only one of three places can do this research. Your research also pointed out that a study needed early planting dates instead of the application of fungicides. This is so important.

IV. Tame Oat Tolerance to Soil-Applied Herbicides: Dr. Brian Jenks, NDSU.

Funding requested: $10,000 with no other funding requested. This will be a no-till system evaluating oat tolerance to Zidua, Warrant, Dual II Magnum, Prowl, and Outlook with treatments applied preemergence and early postemergence. Treatments will be evaluated visually for weed control and crop tolerance during the growing season. Crop yield and test weight will be determined following harvest with a small-plot combine.

There is nothing to control grass in oat. Will have locations in Minot and Hettinger and hope for more rain.

V. Flax Tolerance to Soil-Applied and Postemergence Herbicides: Dr. Brian Jenks, NDSU.

Funding request: $15,000, AmericFlax approved $7500 for Total Project Cost: $22,500. The study may need to be conducted more than one year. This project will evaluate flax tolerance to preemergence and postemergence herbicides. The objective is to find herbicides that are safe on flax, but control redroot pigweed and/or annual grasses.

Will do this in three locations. Need some wet conditions.

VI. Crop Tolerance to Fall-Applied Herbicides: Dr. Brian Jenks, NDSU.

Funding request: $5000; Funding also requested from Northern Pulse Growers and National Sunflower Association - $5000 each. In this study it would determined if fall-applied 2,4-D and dicamba will injure spring-planted sunflower, dry pea, and lentil. If no injury occurs, and after further testing, data would be shared with chemical companies to consider a label change. Labels are written poorly currently. If safe to use, these herbicides would provide another legal

option for growers to control tough winter annual weeds and manage resistant weeds.

There was discussion on other products for fall application.

VII. Herbicide Use in Industrial Hemp (Cannabis sativa) Production: Dr. Kirk Howatt, NDSU.

Funding request: $11,708 for a one-year study. The purpose is to screen herbicides utilized in other crops for either pre-plant or post-emergence weed control in industrial hemp. Findings will aid in registration of herbicides in industrial hemp and direct future research efforts for identifying effective herbicides for the control of broadleaf and grassy weeds as well as volunteer hemp. There are no matching funds.

Commission Goehring moved to approve the final reports. The motion was seconded by Brandenburg. Then Goehring amended the motion to approve all the final reports for payment except to clarify whether Dr. Mendoza gave a final report. If he did not, pay half of that project and the other half upon receipt of the final report. If Dr. Mendoza provided the final report, that project can be paid in full now. All voted in favor of the amended motion. Motion carried.

There a $2000 shortage to pay all the requests. Discussion on cost of the $54,840 request and possibly reduce the amount granted to this project. Dr. Wunsch was asked if this grant could be reduced by $2000 to which he agreed.

Goehring made a motion to reduce the funding for Optimizing the Deployment of Fungicide Seed Treatments Relative to Field Pea and Lentil Planting by $2000. The motion was seconded by Nelson. All voted in favor of funding the projects minus the $2000. Motion carried.

8. **Old Business.** None

9. **New Business.** None

10. **Adjourn.** Meeting adjourned at 3:08 p.m.