

# Resources Made Available By The Sunflower Pathology Working Group

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## BACKGROUND

In 2013, several pathologists that work on sunflower formed a Sunflower Pathology Working Group (SPWG). Financial support from the North Central Integrated Pest Management (IPM) Center helped make this possible. Our mission is to develop reference and Extension materials that will aid identification and management of diseases.

To develop the most useful diagnostic tools for sunflower growers and professionals, the SPWG conducts surveys at annual National Sunflower Association Research Forums. Questions are designed to determine the greatest needs and most useful information delivery method(s).

In recent years, when NSA Research Forum attendees were asked to evaluate their comfort level distinguishing groups of diseases, they were least comfortable with 'non-infectious disorders' (Figure 1). They also reported the pocket-size Sunflower Disease Diagnostic Set was among the most commonly used resource previously developed (Figure 2).

Figure 1. Mean response of 32 survey participants of the 2020 NSA Research Forum to the question 'I feel comfortable identifying and distinguishing these groups of diseases'.

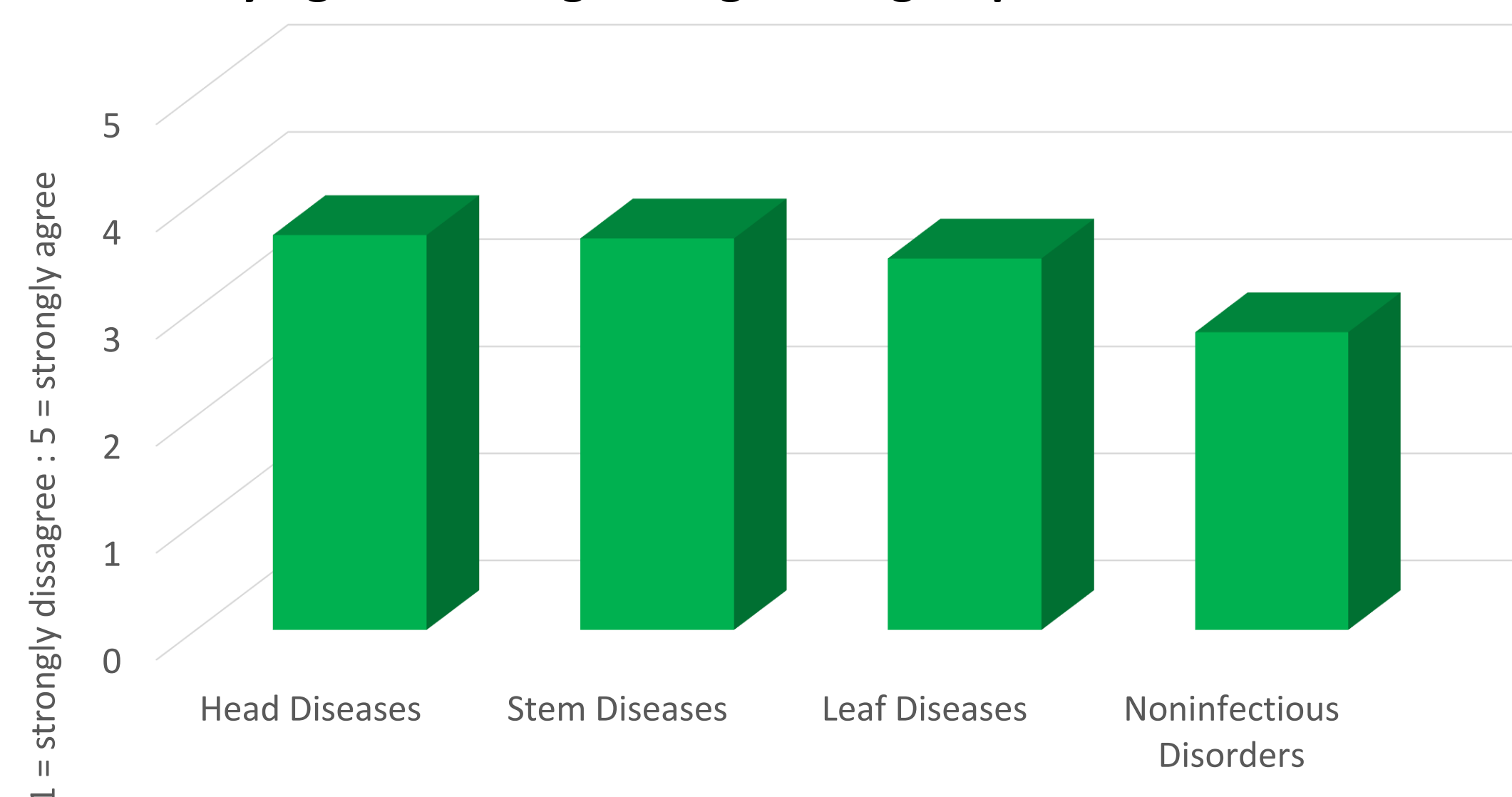
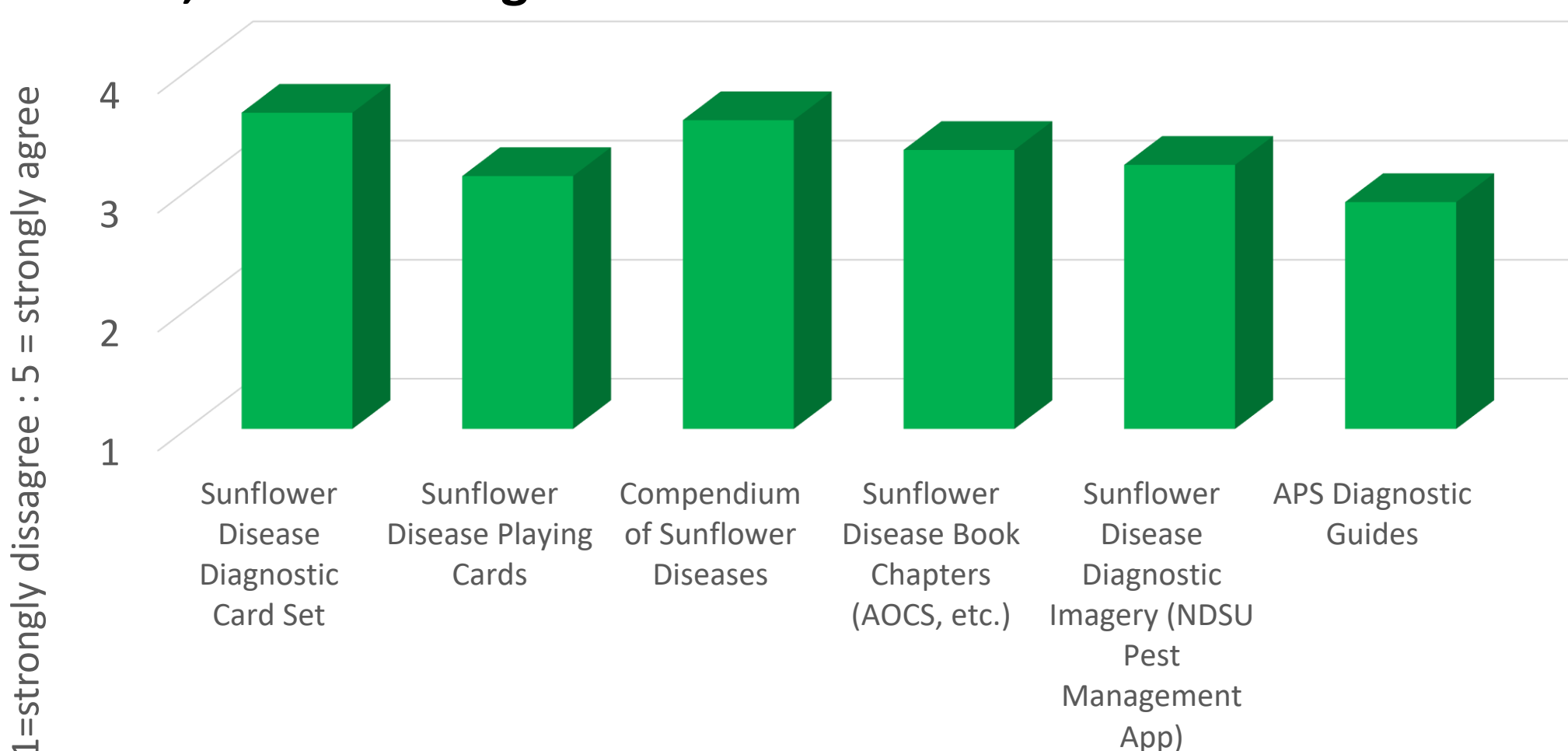


Figure 2. Mean response of 32 survey participants of the 2020 NSA Research Forum to the question 'I have used, or plan to use, the following resource materials'.



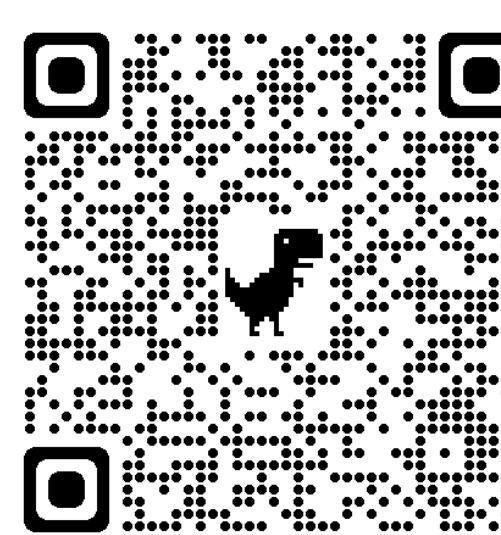
## SUNFLOWER RESOURCES

Over the last decade, the SPWG has created dozens of resources for growers, agronomists, scientists and others in the sunflower industry. These include diagnostic card series for Nutrient Disorders (Figure 3) and Diseases (Figure 4), an updated disease section of [www.sunflowernsa.com](http://www.sunflowernsa.com) (Figure 5), and numerous books and publications available at the American Phytopathological Society ([www.apsnet.org](http://www.apsnet.org)) (Figure 6).

Figure 3. NDSU Extension Publication PP2086, Sunflower Nutritional Disorders Diagnostic Guide.



Available here:

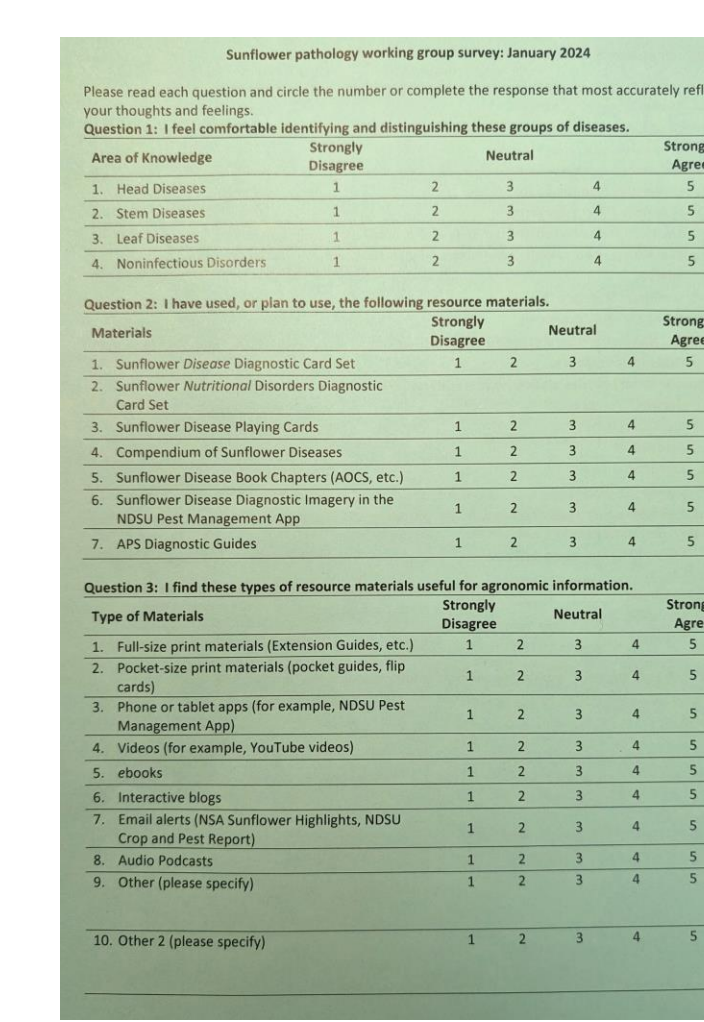


## WHAT WOULD YOU LIKE NEXT?

**The SPWG is continually designing and developing new resources, and wants your advice!**

Please consider taking a 3-5 minute survey to help us develop the information most useful to your farm, business or needs. The survey is anonymous and voluntary; you may quit at any time. The survey is available in paper or at the QR code below. Thank you for advice and support!!!

Figure 7. Please find survey at QR code or paper copy below.



## EXPANDING EXPERTISE

In 2026, we formally welcome Dr. Brandt Berghuis and Dr. Laura Martinez into the SPWG. Their expertise in applied sunflower pathology increases our ability to bring resources to the sunflower growers and industry.

## ACKNOWLEDGEMENTS AND THANK YOU!

We thank past and current NSA Research Forum attendees for their advice and opinions, which provide critical feedback and direction.

We thank past member Dr. Febina Mathew and contributors Drs. David Murray, Pax Blamey, Jay Goos and many others for all their amazing contributions.

We thank the National Sunflower Association for their continued support and guidance of the Sunflower Pathology Working Group.

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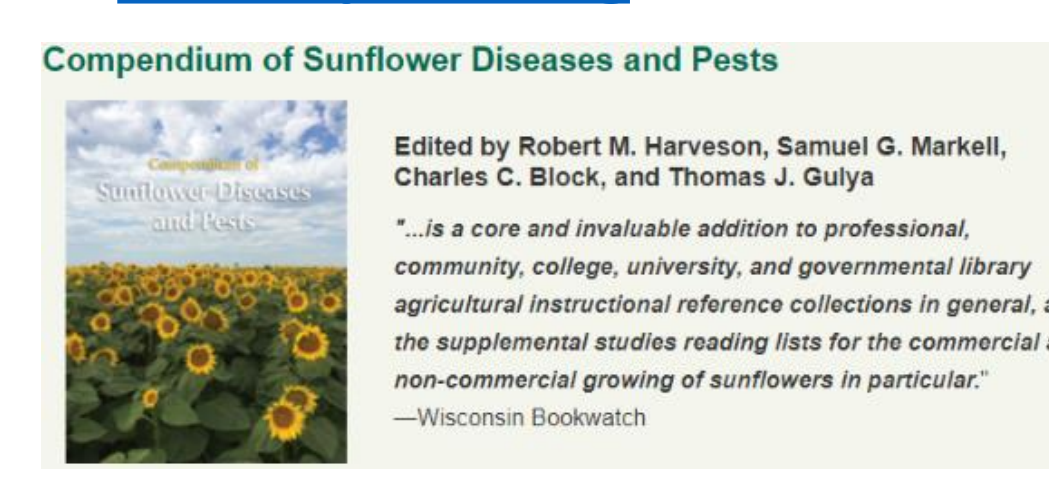
Figure 4. NDSU Extension Publication PP1727, Sunflower Disease Diagnostic Series.



Figure 5. Revised disease section of [www.sunflowernsa.com](http://www.sunflowernsa.com).



Figure 6. Numerous materials housed at the American Phytopathological Society [www.apsnet.org](http://www.apsnet.org)



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Sunflower Rust (*Puccinia helianthi*)

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2023. Sunflower Rust (*Puccinia helianthi*).

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Figure 1. Sunflower rust on a sunflower leaf. The image shows a sunflower leaf with rust lesions.

Figure 2. Sunflower rust on a sunflower leaf. The image shows a sunflower leaf with rust lesions.

Figure 3. Sunflower rust on a sunflower leaf. The image shows a sunflower leaf with rust lesions.

Figure 4. Sunflower rust on a sunflower leaf. The image shows a sunflower leaf with rust lesions.

Figure 5. Sunflower rust on a sunflower leaf. The image shows a sunflower leaf with rust lesions.

Figure 6. Sunflower rust on a sunflower leaf. The image shows a sunflower leaf with rust lesions.