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'.
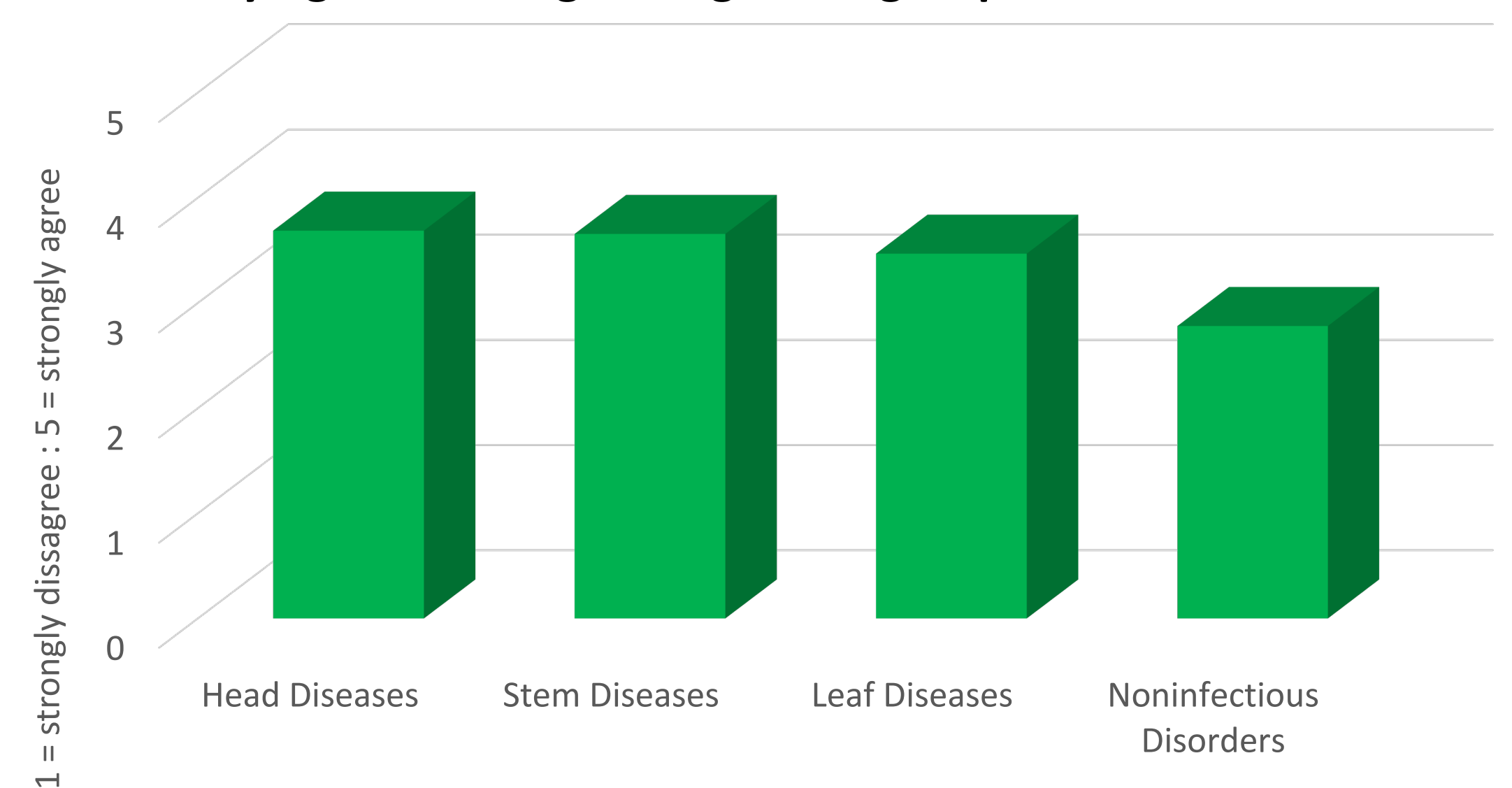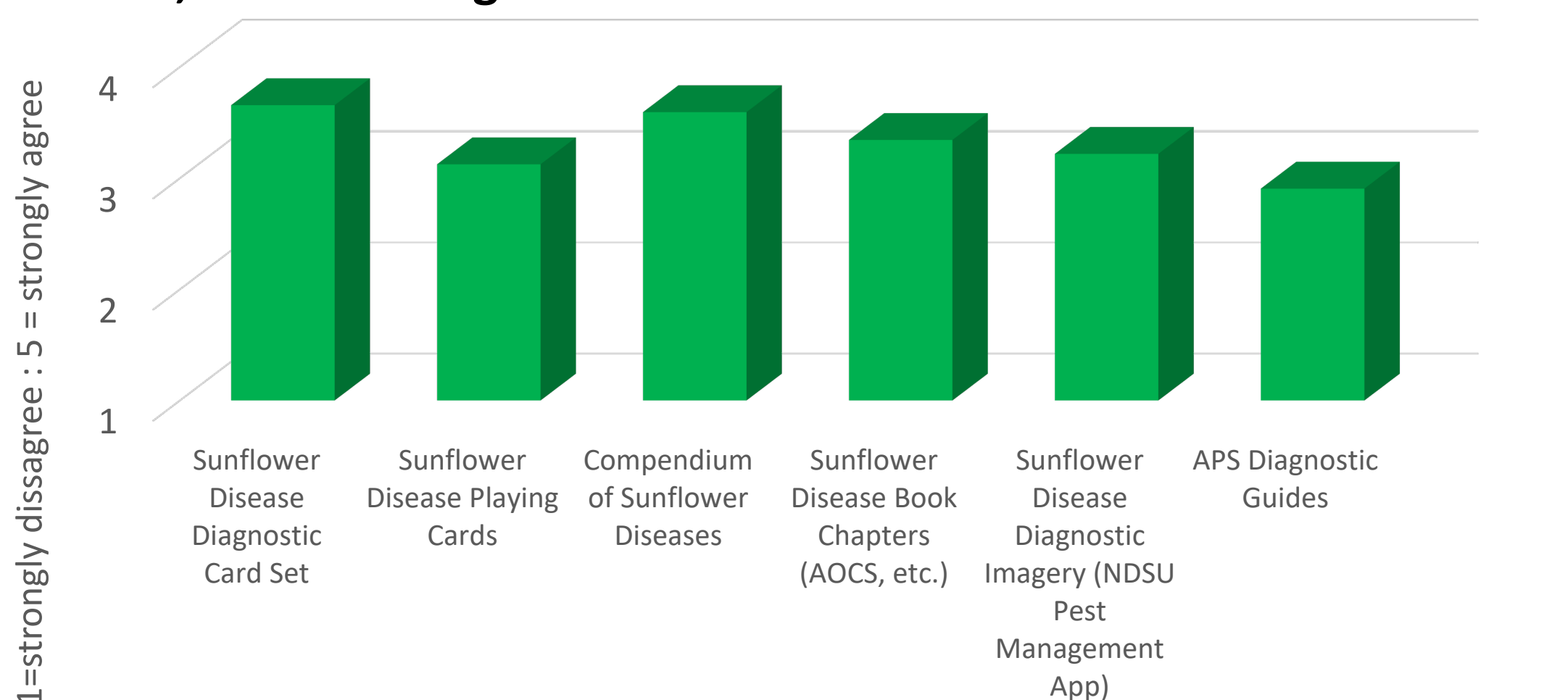

Figure 2. Mean response of 32 survey participants of the 2020 NSA Research Forum to the question 'I have used, or plan to use, the following resource materials'.
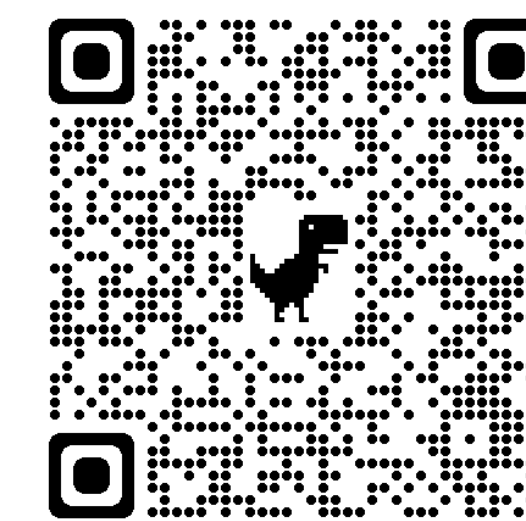

SUNFLOWER NUTRITIONAL DISORDERS DIAGNOSTIC GUIDE

Recently, the Sunflower Nutritional Disorders Diagnostic Series was completed (Figure 3). The guide contains information on 18 disorders and a diagnostic key. The development of the new card set was in response to NSA Research Forum responses to previous surveys (Figures 1 and 2). Sunflower nutrition experts Pax Blamey (University of Queensland) and Jay Goos (NDSU) were critical in development of the new tool.

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

SELECT OTHER AVAILABLE RESOURCES AND UPDATES

Many other resources have been developed and are available for free or for purchase, this includes a 2022/2023 update of the sunflowernsa.com disease webpages, the Sunflower Disease Diagnostic Series, and numerous resources on the website at the American Phytopathological Society (www.apsnet.org) (Figure 4).

Figure 4. (A) Revised disease section of www.sunflowernsa.com, (B) Sunflower Disease Diagnostic Series, and (C) numerous materials housed at www.apsnet.org
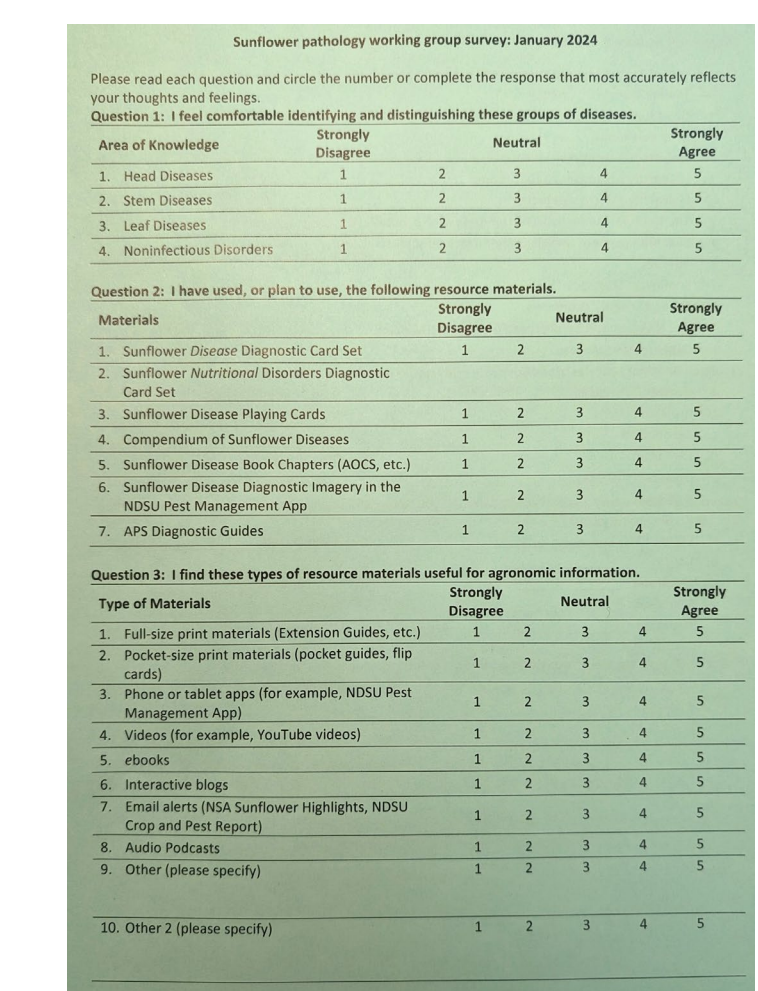

WHAT WOULD YOU LIKE NEXT?

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

Please consider taking a brief survey to help us develop the information most useful to your farm, business or needs.

The survey should take about 3-5 minutes to complete. We will ask you about your comfort level in disease identification, what disease-resources you use, and where and what format you prefer to receive your agronomic/disease information. 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!!!
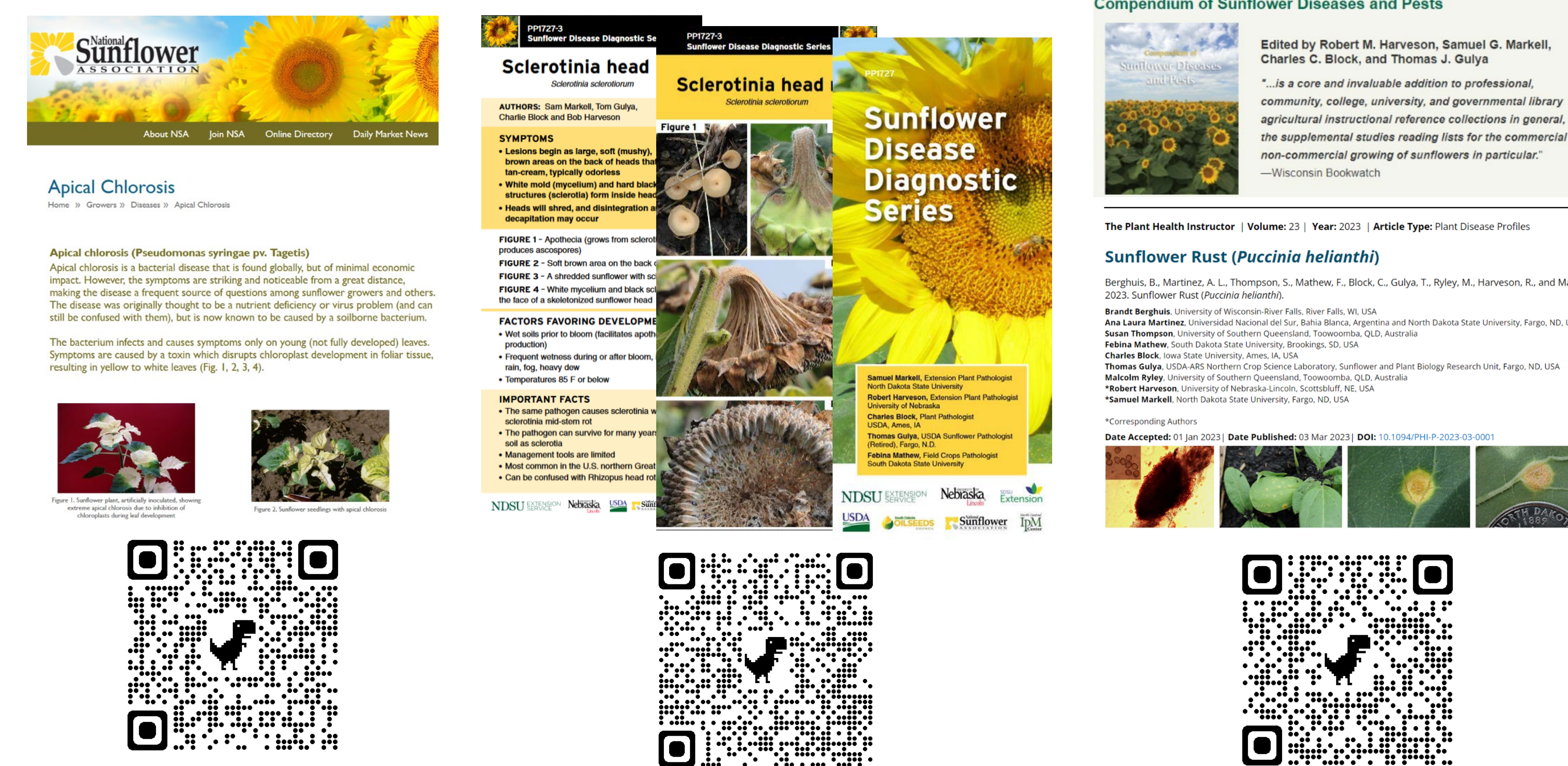
Figure 5. Please find survey at QR code or paper copy below.

ACKNOWLEDGEMENTS