Testimony to North Dakota House Appropriations Committee: HB 1020 North Dakota State University North Central Research Extension Center, Minot, ND January 2023

Mr. Chairman and Members of the Committee: Thank you for the opportunity to address this committee and discuss a few of the significant research and extension accomplishments of the North Central Research Extension Center (NCREC) that directly impact North Dakotans. For the record, I am Shana Forster, director of the NDSU North Central Research Extension Center located in Minot, ND. I have previously served in other roles within both the NDSU Agricultural Experiment Station and NDSU Extension, but have served in my current role as the director of the NCREC since 2016.

The NCREC's current mission areas include, but are not limited to, agronomy research, pulse crops breeding, Extension education in the areas of cropping systems, forage crops production, and crop protection, Foundation seed increase, weed science research, and winter hardy grapes. We strive to provide unbiased, scientific information to farmers and ranchers. I will provide a few updates on current research and Extension programs.

Dr. Brian Jenks, weed scientist at the NCREC has been evaluating weed seed from farmers for many years. Specialty crop block grants from the ND Department of Agriculture provide funding support for this research which is conducted in the NCREC greenhouse during the winter months. The information provided directly to farmers will enable them to make more knowledgeable decisions about herbicide application and crop rotations. His program primarily evaluated suspected chemical resistance in yellow and green foxtail. During the 2022 growing season, many crop consultants and farmers reported issues after herbicide application in that the weed kochia was not controlled effectively. For the last few months, these kochia populations were screened in the NCREC greenhouse and Dr. Jenks determined that some kochia populations in western ND likely have developed resistance to two commonly used preplant burndown herbicides. These preplant herbicides are of utmost importance to producers, especially those practicing minimal tillage. The loss of these herbicides leaves farmers with limited control options, but the information provided by this research enables farmers to make the best management decisions for their operations.

All North Dakota State University Extension Specialists work closely with our county-based Extension agents. Two Extension Specialists housed out of the NCREC, Dr. Leo Bortolon and Dr. James Rogers have worked collaboratively with NDSU Extension agent, Rachel Wald in McHenry county. Following a round table event with McHenry county famers and ranchers, a critical issue emerged; soil health, specifically how to best manage unproductive areas of a field. Drs. Bortolon and Rogers have the technical expertise, background and knowledge in cropping systems and forage production to best solve these problems. Working closely with the producers and county agent, they have begun sampling unproductive sites in grower fields. Test results will help determine what might be causing the issue. Moving forward, Leo, James and Rachel will continue to educate and provide answers to questions using science-based information. Their goal is to make recommendations for managing sites to better improve crop and livestock production.

The critical priority at the NCREC is hiring and retaining diverse candidates to strengthen and expand our research and Extension activities. SBARE considers this the critical need for the NDSU AES and Extension.

In addition, an increase in operating support is needed to our research and Extension activities. Operating money will be used to pursue additional collaborative projects within our NDSU network and with outside scientific partners. Currently, our scientists spend much of their time actively pursuing grant dollars that over time have been become much more limited. Additional operating support is vital to our continued efforts.

I extend my thank you to this committee and the entire North Dakota Legislature for your support of the NCREC, NDAES, ND Extension, SBARE Initiatives, and NDSU. We appreciate your continued support.

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