

**PROGRESS REPORT  
TO  
NORTH CAROLINA SMALL GRAIN GROWERS ASSOCIATION, INC.**

**TITLE:** Partial Technical Salary Support  
**LEADER(S):** J. Paul Murphy  
**DEPARTMENT(S):** Crop and Soil Sciences

**REPORT:**

During the 2019-20 North Carolina budget year, the NC Small Grain Growers provided \$35,000 of the salary and benefits for my technician, Mr. Justin Page. Mr. Page is a 2016 graduate of the Department of Crop and Soil Sciences and was raised on a tobacco farm in Wake County, NC. Thus, he brings many valuable skills to the program.

Mr. Page's primary responsibilities were to run the day-to-day operations of all field and greenhouse research at up to six locations across North Carolina. In addition, he had special responsibilities to conduct our scab screening in the misted / inoculated nurseries at Kinston. This work extended from inoculum preparation beginning in January, through intensive fieldwork in March to June, and post-harvest work estimating *Fusarium* damaged kernels, and preparing and shipping samples for DON analysis. Mr. Page was heavily involved with numerous cooperative tests we plant as part of the SUNGRAINS breeding cooperative, and greenhouse crossing and generation advance during the winter months. He supervised up to six part-time workers during the summer, and one to two part-time workers during the remainder of the year. When time permitted, he assisted with graduate student projects, and equipment maintenance.

Mr. Page is particularly strong in agronomic production practices, having a keen eye with respect to plant growth and detecting field problems. He actually does a significant amount of plant selection in the field, more than any other technician or graduate student I have employed to date. I have been working to encourage him in this aspect, as we can increase the size of some nurseries as he gains confidence. (You don't need a PhD to know a good wheat or oat line when you see it!).

Mr. Page took it upon himself to take over the rye cover crop breeding effort from Dr. Reberg-Horton's program. The graduate student formally in charge of that program graduated and the program was in danger of disappearing. Justin was involved with the program since its inception helping the graduate student with fieldwork operations and selection. His activities included selection and harvest of advanced materials that will go into grain yield, biomass and allelopathy testing in 2020-21.

Justin is always eager to answer any request from the NC Small Grain Growers Association for assistance working to set up displays and man the booth at the Commodity Conference and Farm Show.

Mr. Page also assisted in the evaluation of DNA markers to identify Scab, Hessian fly, powdery mildew and leaf rust resistance genes in materials entering the first year of field testing.

**BUDGET / EXPENDITURE SUMMARY:**

I unexpectedly received funding from the USDA-ARS to support ongoing Doubled Haploid production. I was able to support part of Mr. Page's Salary on that funding; thus I should be able to return unspent funds to NCSGGA in Fall 2021. My best estimates are as follows:

Total support received from NCSGGA in October 1, 2020:.....\$35,000  
Total expended on Mr. Page's salary on June 8, 2021: .....\$10,656  
Encumbered for Mr. Page salary through September 30, 2020: .....\$9,211  
Approximate amount to be returned to NCSGGA: .....\$15,133

**IMPACT STATEMENT:**

Support of the salary of Mr. Justin Page permitted us to conduct research on variety development in wheat, oats and triticale, research on Hessian fly and scab resistance in wheat. Mr. Page conducted the vital screening of the OVT and numerous other wheat lines for resistance to the important Scab fungus, and ensured the success of numerous cooperative studies with other small grains researchers in the US and abroad.