REPORT TO THE W-6 TECHNICAL COMMITTEE

from Harold E. Bockelman, Curator National Small Grains Collection Aberdeen, Idaho June, 2020

The National Small Grains Collection (NSGC) presently holds 147,996 accessions of the small grains (wheat, barley, oat, rye, triticale, rice, and related wild species), an increase of 102 in the past year. This number includes more than 10,000 accessions of mapping populations with GSHO (Genetic Stock – Hordeum) and GSTR (Genetic Stock – Triticum) numbers, which will not be maintained for perpetuity.

NSGC distributed 27,500 accession samples in 594 separate requests in the past 12 months. Approximately 35% of the distributions were to foreign scientists.

NSGC provided back-up samples to NLGRP for the Svalbard Global Seed Vault totaling 7,642 accessions. Also, more than 99% of NSGC accessions have been backed-up at NLGRP.

We are continuing our efforts to capture voucher images of spikes, panicles, and seeds. The images and characterization data provide valuable information to both the germplasm user and for NSGC curation.

Evaluations of NSGC wheat landrace accessions are continuing for reaction to the Ug99 stem rust race in Kenya. We continue to coordinate the assembly of the Stem Rust Nursery in Kenya in cooperation with the Kenya Agricultural & Livestock Research Organisation, CIMMYT, and wheat and barley breeders in public and private programs throughout the U.S. The latest shipment in May included more than 2400 entries from U.S. public and private breeders and researchers.