Objective 1: Wheat Residue Characteristics and Forage Quality

-Stem wall thickness -Amount of biomass -Lignin/quality parameters -Forage quality -Classify varieties by metrics for residue characteristics

Objective 2: Wheat Stem Sawfly Survival and Impact on Wheat Yield

-Create standardized methods for screening in breeding program
-ID peak flights and timings
-Relationship of stem characteristics and sawfly survival
-Impact on yield comparing infested and non-infested areas

Objective 3: Residue Degradation, Soil Water, and Soil Health

-Differences in residue persistence-Effects on OM, long-term nutrient management-Soil water content and impact on subsequent crop yield

Objective 4: Soil Water Content

-Extension guide for producers outlining benefits of variety selection for wheat residue characteristics
-On-site field tours
-Coordination with breeders and seedsmen to promote findings

Varieties with good agronomics, good genetics, combined with good yield potential for grain

Screen genotypes at several locations