

Small Grains Strategic Plan, 2019-2024

EXECUTIVE SUMMARY

VISION

The Texas A&M AgriLife Small Grains Research and Extension Program will be the world's premier source for new knowledge, superior plant materials, applied problem-solving, and Extension education related to the production and use of small grains.

MISSION

In the land-grant tradition, the Texas A&M AgriLife Small Grains Research and Extension Program exists to develop and deliver scientific knowledge and plant materials related to wheat, oat, triticale, rye, and barley.

GOALS

The vital importance of small-grain crops to society requires continual improvement of the crops and their production systems. Small-grains research and Extension programs within the Texas A&M System are a local, state, regional, national, and international source of knowledge, education, and training. The strengths of the TAMUS small-grains program reside in our people and their ability to carry out eight goals:

1. Develop, document, and license superior plant materials;
2. Meet and exceed end-use requirements for marketability of small-grain varieties, including those quality traits associated with improved human-health and livestock-performance outcomes;
3. Integrate conventional and biotechnological research;
4. Characterize the stressors of small grains, and identify critical control points for those stressors and their interactions;
5. Optimize small-grain management practices and cropping systems;
6. Accelerate development of superior plant materials through remote sensing, advanced sensors, and data-analytics technologies;
7. Increase the profitability of small-grains production systems; and
8. Transfer knowledge and technologies to students, practitioners, small-grains producers, and consumers.

ORGANIZATIONAL STRUCTURE

- The SGREP is organized into two Centers of Excellence: at the Texas A&M AgriLife Research and Extension Center at Amarillo, and on the main campus at College Station.
- Each Center of Excellence maintains a multidisciplinary team of scientists who conduct a broad range of small-grains improvement, management, and Extension programs.
- The Center of Excellence at Amarillo develops varieties for the High Plains irrigated and dryland acreage and for the Rolling Plains, using technical support provided by the Vernon Center.
- Multi-disciplinary teams at Amarillo and Vernon develop and deploy production and management programs for small grains as dual-purpose crops to optimize income from integrated crop/livestock systems on the High and Rolling Plains.
- The Center of Excellence at College Station develops varieties and management programs for small grains in the humid regions of central, eastern, and southern Texas; provides classroom instruction to undergraduate and graduate students; and focuses on grain quality improvement through close interdisciplinary ties, especially among scientists in the biotech, cereal quality, remote sensing, and breeding programs.
- The small-grains Extension program is coordinated from the College Station Center of Excellence by a full-time, small-grains Extension Specialist who, in cooperation with regional Extension specialists from various disciplines and County Extension Agents, conducts a statewide educational program that includes development of written and electronic publications and a variety of educational programs and demonstrations.
- New varieties are produced and marketed through Texas Foundation Seed Service and private companies, returning royalty funds to the SGREP.
- Specific needs are addressed at the Texas A&M AgriLife Research and Extension Center at Vernon, at Texas A&M University at Commerce, and at other locations as appropriate.
- Programmatic integration is achieved through (i) rotating, semiannual meetings of the SGREP scientists, technical staff, administrators, and the SGAC, and (ii) assembly of multidisciplinary teams to pursue grants from federal, corporate, and foundation sources.

FINANCIAL MANAGEMENT

- Long-term financial stability of the small-grains program requires a broad mix of revenue sources.
- Pooling royalty revenue supports purchases of capital equipment; royalty funds used for capital purchases leverage investigator, unit, and agency resources.
- Historically, Texas A&M AgriLife administration has matched the pooled royalties being reinvested in research and demonstration equipment. **That arrangement should continue.**
- **Investigators must aggressively pursue external funding.**

IMPLEMENTATION AND OVERSIGHT

Texas A&M AgriLife implements the Small Grains Strategic Plan by:

- Stating a clear intention to do so;
- Encouraging Unit Heads to endorse the Strategic Plan;
- Encouraging reallocation of resources within and among units to implement the Strategic Plan;
- Following and invoking this Strategic Plan when requesting new faculty positions;
- Developing and articulating program priorities aligned with the goals and objectives of the Strategic Plan; and
- Making targeted, discretionary investments in emerging opportunities that further the goals of the Strategic Plan.