



2024-2025 Cool-Season Forages Official Variety Trial Report

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The UF/IFAS 2024–25 Cool-Season Forage Variety Trial is a collaborative effort between the UF/IFAS Forage Team, forage breeders, and the seed industry. This partnership aims to evaluate commercially available and experimental varieties of small grains (rye, oat, triticale, wheat, and barley) and ryegrass.

The data collected from these trials support both forage breeders and producers by assessing the performance of improved materials and monitoring potential disease resistance breakdowns. These results are used to refine our annually updated variety recommendation lists, available at: https://edis.ifas.ufl.edu/publication/AA266.

For the 2024–25 season, we evaluated 73 entries from 17 companies and breeding programs. Two separate trials were conducted:

- <u>Multi-Cut Trial</u> focused on hay and grazing potential, conducted at the Plant Sciences Research and Education Unit (PSREU) in Marion County, FL. This trial followed a 6-week cutting interval.
- <u>Single-Cut Trial</u> aimed at silage production, conducted on-farm at White Oak
 Dairy Inc. in Lafayette County, Shenandoah Dairy in Suwannee County, and also
 at PSREU. Forages in this trial were harvested at a single timepoint, as
 determined by farm management prior to planting spring corn, rather than based
 on forage maturity.

In addition to the main trials, a separate <u>disease nursery</u> was planted at PSREU using all entries from both trials to further evaluate disease resistance.

Details regarding protocols, as well as planting and harvesting dates, are included below.





Multi-cut

- This was conducted at the Plant Science Research and Education Unit in Citra, FL.
- Plots were planted on 11/5/2024, at 30 lb/A for ryegrass and 90 lb/A for small grains.
- Fertilization: 40 + 72 lb N/A prior to the first cut, then 50 lb N/A after each cut.
- Pesticides: Prowl 3.3 EC @ 48 oz/A (11/14/2024); Weedar 64 @ 32 oz/A (12/10/2024).
- Plots were harvested 3 times throughout the season, on 1/8/2025 (Harvest 1); 2/18/2025 (Harvest 2); and 4/2/2025 (Harvest 3).

Single-cut

- The trail was conducted at three locations following farm management schedules.
- Plots were planted between 10/29/2024 and 11/13/2024, at 30 lb/A for ryegrass and 90 lb/A for small grains. Species: annual ryegrass, oat, triticale, wheat, rye and barley.
- Dairy locations were irrigated with wastewater throughout the season and received starter chemical fertilizer. Total N applied 120 150 lb N/A. At PSREU, chemical fertilizer was applied: 40 lb N/A (2 days after planting), 72 lb N/A (4 weeks after planting).
- PSREU pesticides: Prowl 3.3 EC @ 48 oz/A (11/14/2024); Weedar 64 @ 32 oz/A (12/10/2024).
- All cultivars were harvested together, regardless of maturity, following farm schedule. Harvest dates were between 2/28/2025 and 3/13/2025.

Disease nursery

- Planted at PSREU (12/4/2024), including all entries from both multi- and single-cut trials
- Fertilized chemically; 40 lb N/A (2 days after planting), 72 lb N/A (4 weeks after planting).
- Herbicides applied: Clean Amina, at 16 oz/A (2/11/25).
- No cutting was performed. Main diseases: leaf spots, rusts and virus.
- Diseases rated twice: 2/5/2025 (BYDV) and 4/9/2025 (leaf spot and rust), on a 0 10 scale (shown as 0 1 in Figures). Higher values indicate greater incidence.

<u>Disclosure:</u> this variety test is conducted independently by UF/IFAS faculty and is open for all seed companies and breeding programs. There are other varieties available in the market that are not included in the test, which does not mean they do not perform well. Our variety recommendation lists consider results from multi-location trials, in collaboration with Auburn University and the University of Georgia and include varieties that have shown superior performance over a three-year testing period. Varieties not entered in the test are liable to be dropped from the recommendation lists because of limiting data.

For more information, email the Forage Team at forages@ifas.ufl.edu, or contact your local extension agent.