

MICHIGAN STATE UNIVERSITY

MEMORANDUM

DATE: February 5, 2021

TO: Cooperators in the Michigan Forage Variety Trials

FROM: Dr. Kim Cassida, Michigan State University Forage Specialist
Joe Paling, Research Assistant at East Lansing, Michigan
James Dedecker, Upper Peninsula Research and Extension Center, Chatham, Michigan

RE: Invitation for 2021 Alfalfa, Perennial Grass, Red Clover, Annual Forage, and Cover Crop Variety Trials



College of
Agriculture and
Natural Resources

Department of Plant
Soil and Microbial
Sciences

Forage Variety Trials

1066 Bogue Street
A286 Plant and Soil Sciences
East Lansing, MI 48824

517-355-0271
Fax: 517-353-3515
psm.msu.edu

MSU is an affirmative action,
equal-opportunity employer.

Included are applications for the 2021 Michigan Forage Variety Trials.

Locations available are East Lansing in southern lower Michigan at the MSU Agronomy Farm and Chatham in the Upper Peninsula at the MSU Upper Peninsula Research and Extension Center.

Perennial Grass - Trials are being offered for East Lansing and Chatham. Varieties of orchardgrass, tall and meadow fescue, festulolium, timothy, perennial ryegrass, and Kentucky bluegrass have been evaluated in the past few years. Perennial grass trials are usually harvested for three production years after the seeding year.

Alfalfa – Alfalfa variety trials are being offered at East Lansing and Chatham. These trials are usually harvested for three full production years after the seeding year.

Red Clover – Red clover variety trials are being offered at East Lansing. These trials are usually harvested for two full production years after the seeding year.

Annual Forages - Annual forage trials with 4 different planting dates are being offered at East Lansing and Chatham. Entries are invited in the categories of oats, peas, oat/pea mixtures, clovers to be seeded in the spring and harvested for yield in the summer. Seedings in early summer of sorghum, sudangrass, sorghum hybrids, millets, teff, crabgrass to be harvested later in the summer or fall. Annual grasses (Italian and annual ryegrass, teffgrass, crabgrass) seeded in the early summer and harvested for yield. Small grains (wheat, oats, barley, rye, triticale) seeded in the spring and harvested in the summer or winter small grains planted in late summer/early fall and harvested for forage yield the following spring.

Cover Crop – Cover crop variety tests are being offered at East Lansing and Chatham. These are to be planted in the late summer to simulate conditions for planting a cover crop after wheat is harvested.

Results of these trials are used by MSU personnel for variety selection recommendations. Results are available on the Michigan State University Forage Connections web page at <http://forage.msu.edu>. Variety trial results will be distributed through the Michigan State University Extension Service and the Michigan Farm Bureau through the Michigan Farm News.

MICHIGAN ANNUAL FORAGE VARIETY TRIALS, 2021

Dr. Kim Cassida & Joe Paling
Dept. of Plant, Soil and Microbial Sciences, Michigan State University
1066 Bogue St Rm A286, East Lansing, MI 48824

The Michigan Agricultural Experiment Station will accept proprietary varieties and experimental strains of annual forages for evaluation under rainfed conditions at East Lansing and Chatham.

1. Description of Trials.

Locations: Two locations are offered in 2021.

- (1) MSU Research Farm, **East Lansing**
- (2) Upper Peninsula Research & Extension Center, **Chatham**

Planting dates: Three planting dates.

- (1) **Spring (May planting)**: Annual/Italian ryegrass grass and annual clovers (summer harvest and a following spring harvest of surviving entries)
- (2) **Early Summer (June planting)**: Sorghum, sudangrass, sorghum hybrids, millets, teff, crabgrass (late summer/fall harvest)
- (3) **Late Summer (August or September planting)**: winter small grains, annual/Italian ryegrass (spring harvest)

Data Collected: Yield

Trials are seeded with either a Carter small plot nursery seeder or a tractor mounted research drill in plots 4 feet wide and at least 20 feet long. A minimum of four replications is used. The trials are harvested for yield by cutting the center 3 feet with a Carter self-propelled forage flail harvester at a time appropriate for optimum yield. All trials are managed for high yield using MSU recommendations for fertility, weed, and pest control under natural rainfall.

Michigan State University will conduct the trials in a professional manner but assumes no financial liability for failure to obtain stands or loss of stands due to uncontrollable conditions.

2. Eligibility of Entrants. Any entity may enter varieties, experimental strains, blends, or mixtures in the test provided they have legal permission to do so for protected varieties. This includes private or public developers, dealers, distributors or merchandisers of alfalfa varieties, other Agricultural Experiment Stations, non-profit groups, farmer cooperatives, or individuals.
3. Rejection. Any entry may be rejected if:
 - (1) The trial is cancelled. A minimum of 10 entries per test location may be required to hold a test.
 - (2) There is misrepresentation.
 - (3) Seed arrives too late for planting.
 - (4) Adequate seed is not available.
 - (5) Documentation of species/variety proportion in mixtures and blends is not provided.
4. Entry Fee. **\$300.00** per entry.
Make checks payable to Michigan State University and send with applications to:
Joe Paling, 4450 Beaumont Rd, PSM Agronomy Farm, Michigan State University, Lansing, Michigan 48910

Deadline for Entry. Applications and seed for Spring and Early Summer Tests must be received by Joe Paling by **April 15, 2021**. Applications and seed for Late Summer Tests must be received by Joe Paling by **July 1, 2021**.

5. Seed Required. Seed for released varieties is to be from a commercial source. Arrangements may be made with MSU to deliver commercial seed through local dealers, distributors, or other sources. If germination rates are above 90% the following weights per trial apply:

Wheat – 800 g seed

Barley – 800 g seed

Rye – 800 g seed

Annual Ryegrass – 200 g seed

Italian Ryegrass – 200 g seed

Oat/pea and triticale/pea mixtures – 600 g seed

Annual clovers – crimson, berseem, balansa, arrowleaf, Persian – 200 g seed

Forage sorghum, sudangrass, and sorghum hybrids, all millets – 500 g seed

For other species and mixtures, contact us for advice before shipping seed.

Triticale – 800 g seed

Oats – 800 g seed

Crabgrass – 400 g seed

Teffgrass – 200 g seed

6. Publication. Each entrant will receive a yearly summary of the data in November, including all released and experimental varieties. The yearly summaries will be published in the *Michigan Farm News* in February. Complete test results will be published by Michigan State University Extension and will be posted on the MSU Forage Connection website <http://forage.msu.edu/>. Results will include the proportions of mixture components.
7. For assistance, contact Joe Paling at paling@msu.edu, cell 517-242-4155, or Kim Cassida at cassida@msu.edu, 517-353-0278.

MICHIGAN ANNUAL FORAGE VARIETY TRIALS, 2021

Dr. Kim Cassida & Joe Paling
Dept. of Plant, Soil and Microbial Sciences, Michigan State University
1066 Bogue St Rm A286, East Lansing, MI 48824

Submit one form for each variety or entry and send to the address below with entry fee of \$300 per entry, location, and planting date. Entries for Spring and Early Summer planting dates must be received by April 15. Entries for Late Summer Planting Date must be received by July 1.

Seed of the following amounts (per location and Planting Date) is required.

Wheat – 800 g seed	Triticale – 800 g seed
Barley – 800 g seed	Oats – 800 g seed
Rye – 800 g seed	Crabgrass – 200 g seed
Annual Ryegrass – 200 g seed	Teffgrass – 200 g seed
Italian Ryegrass – 200 g seed	
Oat/pea mixtures – 500 g seed	
Annual clovers – crimson, berseem, balansa, arrowleaf, Persian – 200 g seed	
Forage sorghum, sudangrass, and sorghum hybrids, all millets – 500 g seed	
For other species and mixtures, contact us for advice before shipping seed.	

Marketer *(commercial entries only)*

Company _____
Contact _____
Address _____
City, State ZIP _____
Phone/FAX _____
E-Mail address _____

Breeder

Company _____
Contact _____
Address _____
City, State ZIP _____
Phone/FAX _____
E-Mail address _____

3. Name of entry _____
(Please indicate name desired when data are reported)

4. Brief description _____

5. Is this a released variety? Yes _____ No _____

6. Maturity (circle one) Early Medium Medium-late Late

7. Ploidy level (Ryegrass) _____

8. Rust Resistance Yes _____ No _____

9. Germination _____ Purity _____ Date of Test _____

Locations -- \$300.00 per entry per Location and Planting Date combination

East Lansing _____ Planting Date: Spring _____ Early Summer _____ Late Summer _____
Chatham _____ Planting Date: Spring _____ Early Summer _____ Late Summer _____

Payable to **Michigan State University**: ATTN: Joe Paling, 4450 Beaumont Rd, PSM Agronomy Farm
Michigan State University, Lansing, MI 48910. Email: paling@msu.edu, Cell: 517-242-4155.