

MICHIGAN STATE UNIVERSITY

MEMORANDUM

DATE: February 3, 2023

TO: Cooperators in the Michigan State University Forage Variety Trials

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

RE: Invitation for 2023 Alfalfa, Perennial Grass, Red Clover, and Annual Forage Variety Trials



College of
Agriculture and
Natural Resources

Department of Plant
Soil and Microbial
Sciences

Forage Variety Trials

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MSU is an affirmative action,
equal-opportunity employer.

Included are applications for the 2023 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 2 different planting dates are being offered at East Lansing. Entries are invited in the categories of annual grasses and annual clovers to be seeded in the spring and harvested for yield in the summer. 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.

Results are available on the Michigan State University Forage Connections web page at <http://www.forage.msu.edu/publications>. Variety trial results will be distributed through the Michigan State University Extension Service and the Michigan Farm Bureau through the Michigan Farm News.

MICHIGAN ALFALFA VARIETY TRIALS, 2023

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 alfalfa for evaluation at two locations in 2023. The trials are intensively managed for high yield under high fertility, utilizing all factors to maximize yield under natural rainfall.

1. Locations for 2023

- (1) MSU Research Farm at **East Lansing**. Trials are managed using a four-cut system from late May through November.
- (2) MSU Upper Peninsula Research and Extension Center at **Chatham**, approximately 300 miles north of East Lansing. Chatham has cold winters with deep snow cover. Winter-hardiness and persistence are important at Chatham. Chatham trials are managed for three cuttings from June to October.

2. Description of Trials. Alfalfa trials are seeded with a five-row nursery seeder with six-inch spaces between rows in plots 3 feet wide and at least 20 feet long (generally 22-25 feet). A minimum of four replications is used. Plots are harvested with a Carter self-propelled forage flail harvester. Fertilizer is applied to meet MSU recommendations for high yield. Insecticides are applied when necessary to prevent yield reduction from alfalfa weevil (late May to early June) or potato leafhopper (June 15-September 15). Herbicides are applied as needed to control weeds. Roundup-ready entries will be managed in the same trial as conventional entries.

Standard procedures for determining dry matter yield are used. Plots will be harvested for at least three years after the seeding year unless stands are injured by uncontrollable causes. Preferably, alfalfa will be seeded in the spring and harvested one to three times in the seeding year. Seeding may be delayed until late July or early August to achieve best results in stand establishment, in which case no seeding year harvests will be taken.

Data on stand longevity and disease incidence will be obtained when appropriate. 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.

3. Eligibility of Entrants. Any entity may enter varieties or experimental strains 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.
4. Rejection. Any entry may be rejected if:
 - (1) The trial is cancelled. A minimum of 10 paid entries (excluding check varieties) will be required at a location.
 - (2) There is misrepresentation.
 - (3) Seed arrives too late for planting.
 - (4) Adequate seed is not available.
 - (5) Variety is not resistant to bacterial wilt.
 - (6) Entry is a blend.

5. Entry Fee. **\$600.00** per variety per test location entered.
Send with applications to:
Joe Paling, 4450 Beaumont Rd, PSM Agronomy Farm, Michigan State University, Lansing, Michigan 48910
Paling@msu.edu.

Deadline for Entry. Applications must be received by Joe Paling by **April 10, 2023**.

6. 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. All seed will be inoculated with Rhizobium at MSU prior to planting. Seed treated with fungicides will be accepted.

Released varieties: 200 grams of seed per entry for each location.

Experimentals: 100 grams per entry for each location is adequate.

Publication. Each entrant will receive a yearly summary of the data in December, including all released and experimental varieties. The yearly summaries will be published in the January 30th edition of the *Michigan Farm News*. Complete test results will be published by Michigan State University Extension and will be posted on the MSU Forage Connection website <http://www.forage.msu.edu/publications>.

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 2023 ALFALFA VARIETY TRIALS

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 by April 10, 2023.
 Seed of released varieties (200 grams per location from a commercial source) and experimental entries (100 grams per location) should be received by April 28, 2023.

1. Company _____
 Contact person _____ Marketer _____
 Email _____
2. Address _____
 City _____ State _____ Zip _____
 Phone (____) _____ Fax (____) _____
3. Name or number of entry _____
4. _____
 (Please indicate name desired when data are reported)
5. Brief description _____
 Is this a commercially released variety? Yes No

Please list any additional e-mail addresses you would like the results sent to:

Date of Seed Test _____
 Purity _____
 Germination, quick _____
 Germination, hard _____
 Germination, total _____
 Scarified - yes or no (circle one) _____

East Lansing Standard _____
 Chatham Standard _____
 Total Locations _____ * 600.00 = _____

Disease Resistance							
Fall Dormancy		1	2	3	4	5	6
Winterhardiness		1	2	3	4	5	6
Resistance Ratings		<u>DRI</u> _____					
Bacterial Wilt		HR	R	MR	LR	S	
Verticillium Wilt		HR	R	MR	LR	S	
Fusarium Wilt		HR	R	MR	LR	S	
Anthracnose		HR	R	MR	LR	S	
Phytophthora root rot		HR	R	MR	LR	S	
Aphanomyces (race 1)		HR	R	MR	LR	S	
Aphanomyces (race 2)		HR	R	MR	LR	S	
Stem Bulb Nematode		HR	R	MR	LR	S	
Pea Aphid		HR	R	MR	LR	S	
Potato Leafhopper		HR	R	MR	LR	S	

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.