



DATE: February 17, 2015
TO: Variety Release and Recommendation Committee Members
FROM: John Sherwood, Chair
RE: 2015 Minutes and Committees
Chair: John Sherwood, Department Head PSPP
Secretary: Irene Decker, Administrative Assistant, PSPP

Crop Science

Entomology

Horticulture

Plant Biology

Plant Genetics

Plant Pathology

Present: John Sherwood, Irene Decker, William Grey, John McDonnell, Steve Grove, Jason Cook, Ron Ramsfield, Ryan Holt, Heather Rimel, Cassidy Marn, Collin Watters, Mike Giroux, Gale Sharp, Angelia Suffridge, Nancy Blake, Hwa-Young Heo, Jay Kalous, Patrick Hensleigh, Steve Becker, Koleen Spurgin, Mary Burrows, David Weaver, Jamie Sherman, John Miller, Tom Allen, Dan Picard, Gadi V.P. Reddy, Charles Boyer, Ken Kephart, David Wichman, Tom Siderius, Bob Stougaard, Tracy Sterling, Mike DeVries, Paul Morano, Ron Larson, Dave Gettel, Craig Cook, Deanna Nash, Jessica Torrion, Yesuf Mohammed, Kent McVay, Brooke Bohannon, Luther Talbert, Becky Mahurin, Peggy Lamb, Joyce Eckhoff, Qasim Khan, Norm Weeden, Phil Bruckner, and Chengci Chen

Not in attendance: Monty Lesh, Perry Miller, Bill Hoch, Zach Miller, and Fabian Menalled. Tracy Sterling took the place of Fabian Menalled (Bill Hoch and Monte Lesh submitted their votes in absentia).

Agenda

Following is the agenda for the 2015 Variety Release meeting to be held on Tuesday, February 17, at 1:00 pm in the Gallatin Room at the C'Mon Inn. The wheat and forage committees (see attached) are the only ones that will need to meet this year.

1. Approval of the Minutes of the 2014 meeting.
2. Discuss and vote on the motions submitted to the Wheat and Specialty Crops Committees.
3. Discuss the proposal by David Wichman regarding the release and sale of winter triticale lines.

1. Approval of the Minutes of the 2014 meeting.

D. Wichman - Moved to approve the 2014 minutes.

W. Grey - Seconded the motion.

Vote: 16 for, 0 against

2. Discuss and vote on motions submitted to the Wheat Committee.

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MOTIONS

2015 Variety Release Committees

Wheat Variety Release Committee		
Voting Members, 16	Affiliation	Appointing Administrator
<i>Chair, John Sherwood</i>	<i>PSPP Head</i>	<i>Director MAES</i>
1. Phil Bruckner-spring	Breeder	PSPP Head
1. Luther Talbert-winter		
2. Mike Giroux	Quality - Cereal or Forage	PSPP Head
3. Mary Burrows	Plant Pathologist	PSPP Head
4. Bill Grey	Manager	MT Foundation Seed Program
5. Ron Larson	Manager	MT Seed Growers Association
6. Fabian Menalled -Tracy Sterling voting	Weed Scientist	LRES Head
7. Perry Miller - absent	Cropping systems	LRES Head
8. David Weaver	Entomologist	LRES Head
9. Peggy Lamb		NARC Superintendent
10. Dave Wichman		CARC Superintendent
11. Gadi Reddy		WTARC Superintendent
12. Bob Stougaard		NWARC Superintendent
13. Joyce Eckhoff		EARC Superintendent
14. Ken Kephart		SARC Superintendent
15. Monte Lesh – voted in absentia	Chair	MAES Advisory Board
16. Tom Siderius		Montana Wheat and Barley Committee
Ex-officio Becky Mahurin	Dir. Technology Transfer	V.P. for Research, Creativity and Technology Transfer

Phil Bruckner - Moved that SY Wolf hard red winter wheat be considered for variety recommendation in the state of Montana for all districts except 1 and 6.

SY Wolf is a hollow stemmed, hard red winter wheat developed by Syngenta Seeds, Inc. and released to AgriPro Associates in 2011. PVP, Title V certificate was issued in 2012. SY Wolf was derived from the cross "W99-331/97x0906-8". It has exhibited very good relative yield in all districts with the exception of Kalispell and Sidney. Test weight is very good averaging 1 lb. heavier than Yellowstone. Its heading is medium, similar to Jagalene. It is a strong strawed, semidwarf variety with height slightly taller than CKC Falcon. Winterhardiness is average, similar to Jagalene. SY Wolf has a very good overall disease package. It is resistant to stem rust and moderately resistant to leaf rust and tan spot. It has intermediate tolerance to stripe rust. Overall quality of SY Wolf is acceptable with good protein levels, averaging slight above Yellowstone. SY Wolf appears well adapted to the majority of Montana growing conditions. Compared to other hollow stemmed varieties, SY Wolf would provide growers with a shorter, strong strawed plant type while still maintaining good yield levels and good overall disease resistance.

D Wichman – Seconded the motion.

Vote: 13 for, 1 for in absentia, 0 against

Phil Bruckner – Moved that “SY Soren” hard red spring wheat be considered for variety recommendation in the state of Montana for all districts except 1 under irrigation and additionally, districts 2 and 6 under dryland.

J. Eckhoff – Seconded the motion.

P Morano - SY Soren is a hollow stemmed, hard red spring wheat developed by Syngenta Seeds, Inc. and released to AgriPro Associates in 2011. PVP, Title V certificate was issued in 2012. SY Soren was derived from the cross “Norpro/Kelby”. It has medium maturity and very good test weight. It is a short semidwarf, similar to Brennan. Straw strength is very good, between Kelby and Kuntz. It is resistant to stem rust and moderately resistant to leaf rust. It has very good tolerance to Fusarium head blight. Overall quality of SY Soren is acceptable. Protein has been very high averaging nearly 1% higher than Vida.

SY Soren has shown good adaptation across the Northern Plains including several areas in Montana. It has been tested in MSU trials for the past four seasons. Its best performance has been in dryland trials at Bozeman, Conrad and Sidney. It compares favorably for yield and/or protein to the predominant varieties grown in these areas. Limited data is available under irrigation but SY Soren would provide for very good tolerance to Fusarium head blight compared to many of the currently grown varieties.

This variety is new to Montana, but it has been in North Dakota for three years and is a top performer there. It is not good under irrigation.

J. Sherwood – Would you like to amend the motion Phil?

P. Bruckner - Moved that “SY Soren” hard red spring wheat be considered for variety recommendation in the state of Montana for all districts under dryland conditions only.

J. Eckhoff – Seconded the motion.

Vote: 13 for, 1 for in absentia, 0 against

Phil Bruckner – Moved that Jagalene (1.6% of 2014 acreage), Norris (0.8%), Bynum (0), Promontory (0), and Genou (6.6%) be removed from the Montana Winter Wheat Recommended Variety List.

D. Wichman – Seconded the motion.

P Bruckner – Westbred and Syngenta are moving in a different direction so we need to remove these varieties as better varieties are available. Most of these cultivars

are no longer in production and certified seed is no longer being produced and marketed. For example, WB Quake, Judee, and Warhorse are better than Genou.

P. Bruckner repeated motion.

W. Grey – Seconded the motion.

Vote: 13 for, 1 for in absentia, 0 against.

Phil Bruckner – Moved that MT0978 hard red winter wheat be approved for release in 2015, that MT0978 be named 'NARC1915,' and that NARC1915 be recommended for districts 2, 3, 4, and 5 as a protected MAES Public Release.

W. Grey – Seconded the motion.

P. Bruckner – This is a variety that has been around for a number of years. It is high yielding, no better than Yellowstone or Colter. It is two inches shorter than Yellowstone, has better stem rust resistance than Yellowstone and will add some diversity to the hollow stem, stripe rust resistance group.

J. Sherwood – It is not required that we come up with a name.

P. Bruckner – It is the 100th centennial for the NARC so that is why we chose that name. We will evaluate further potential variety names for MT0978 to find one that is more acceptable.

J. Sherwood – Most of the wheat and barley varieties that come out of this program are PVP protected, and a committee looks at that. Should this be released as a protected variety? This is a good time for the industry folks that are present to speak up.

W. Grey – How would this perform in other states in the region?

P. Bruckner – It has been tested in North Dakota, Idaho and Wyoming, but it does the best in Montana. Likely production will be primarily in Montana.

Vote: 13 for, 1 for in absentia, 0 against.

J. Sherwood – The Director makes the decision as to whether or not a variety is released to Foundation Seed. This committee only recommends this to the Director.

Specialty Crop Variety Release Committee		
Voting Members, 15	Affiliation	Appointing Administrator
<i>Chair, John Sherwood</i>	<i>PSPH Head</i>	<i>Director MAES</i>
1. Bill Hoch - voted in absentia	Breeder	PSPH Head
2. Norm Weeden	Breeder	PSPH Head
3. Mary Burrows	Plant Pathologist	PSPH Head
4. Bill Grey	Manager	MT Foundation Seed Program
5. Ron Larson	Manager	MT Seed Growers Association
6. Fabian Menalled- Tracy Sterling voted	Weed Scientist	LRES Head
7. Perry Miller- absent	Cropping systems	LRES Head
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11. Gadi Reddy		WTARC Superintendent
12. Bob Stougaard		NWARC Superintendent
13. Joyce Eckhoff		EARC Superintendent
14. Kent McVay		SARC Superintendent
15. Monte Lesh - absent	Chair	MAES Advisory Board
16. Zach Miller - absent		WARC Superintendent
Ex-officio Becky Mahurin	Dir. Technology Transfer	V.P. for Research, Creativity and Technology Transfer

David Wichman – Moved that safflower line C17 be used in bird and ruminant wildlife food plots, cover crop mixtures, annual and late summer and fall graze, and safflower for grain (birdseed) in areas with elevations between 3300 to 4300 feet, areas typically too cool for safflower production.

N. Weeden – Seconded the motion.

D. Wichman – This is a spineless variety of safflower with a higher yield. I began work on this 29 years ago. Every time you can add a crop to what we currently grow, it is an advantage.

J. Sherwood – In the past we have had a number of safflower varieties that have come up before this committee and they have all be licensed. Are you planning on having this licensed?

D. Wichman – It would be best to sell this variety to an industry person. This is a minor use crop and there is not room for everyone to be in on it.

J. Sherwood – So yes, it would be licensed.

S. Groves - It was one of the individuals from industry – Do you PVP of your specialty crops as well?

D. Wichman – We leave that up to the person who buys it.

J. Sherwood – The varieties that come out of MSU are licensed and if the licensee chooses to protect it, they may choose to protect it at their expense.

D. Wichman – We have 600 lbs of seed, so that may be enough to get started.

B. Mahurin – We have licensed lines with less seed than that.

W. Grey- It's primary characteristic is that it is spineless and would it be going toward the bird seed market primarily?

D. Wichman – It also has high quality forage and seed for wildlife.

J. Sherwood – Because of the type of crop it is, it would be put up for licensed release as opposed to public release.

D. Wichman repeated the motion.

W. Grey – Seconded the motion.

Vote: 12 for, 2 for in absentia, 0 against

David Wichman - Moved that safflower line C24 or Baldy be used in bird and ruminant wildlife food plots, cover crop mixtures, and annual late summer and fall graze and for grain (birdseed).

P. Lamb – Seconded the motion

D. Wichman – In Sidney area, *Alternaria* leaf spot can be very devastating to safflower. It can look like a beautiful plant, but as the disease progresses the seed shells are empty. In Central Montana, they rarely see this disease. In the Sidney area, it was not evaluated. It was evaluated for oil, but does not have a high oil content. Its oil content is about 32%. This line has better adaptation to elevations 2600 to 3300 feet above sea level.

I have 400 lbs of seed of Baldy.

D. Weaver – Is it recommended for a cover crop?

D. Wichman – Yes, it is suitable for that.

D. Wichman repeated the motion.

Vote: 12 for, 2 for in absentia, 0 against

David Wichman - Moved that grain sorghum line 13sorg 23 be released to be used for wildlife feed and habit plots, cover crop plantings and for livestock feed forage.

This started back in 1986 when David Sands said to me that he had seen a sorghum population from Iowa. I had been working in eastern Montana during a very dry period. During those dry years the barley did not produce sufficient stubble to protect against erosion, so I thought grain sorghum might offer some potential as an alternative feed grain that would provide more soil protection. It would be good to have in eastern Montana so I started the selection process. The first plants to head were selected and an effort was made to keep some diversity of plant types in the populations. Eventually, we derived sorghum lines that head as much as 20 days earlier than the commercial line DKS28. In 2013 40 lines were planted at NARC Havre by Peggy Lamb. The commercial line produced more than 4000 lbs grain per acre and the some of the Moccasin selection produced over 3500 lbs/acre. Yields of some of the lines have exceeded 500 lbs at CARC. Yields at NARC in 2014 were lower than in 2013 but still exceeded 3000 lbs, which is much better than anticipated.

N. Weeden – Seconded the motion.

J. Sherwood – This would also be licensed.

P. Lamb – What if it is licensed and no one picks it up?

W. Grey – The seed would go back to the breeder.

J. Sherwood – Has there been actual genetic selection that makes it unique from what you started with?

D. Wichman – Yes, There were a wide array of plant types from those with good head types to those that look like shatter cane.

K. Kephart – If there are shatter cane types that is a problem because shatter cane is a weed.

D. Wichman – That is not a problem with this variety.

B. Mahurin – Would you call this a population?

D. Wichman – Not all the plants are the same, some have purple, white, or brown seeds; there is quite a variety of types. Some are very ornamental, some not.

R. Larson – A variety by definition is uniform and stable. The Seed Act states that anything that has over 5% is an off type, it is a mix at that point.

D. Wichman – Three generations are a certified class. The breeder or Foundation generation will have to be grown at a higher elevation, 3800 ft or higher to maintain the selection pressure for adaption to lower heat units. We want to maintain that short season, early maturity characteristic.

J. Sherwood – It is more of a germplasm than a variety.

D. Wichman – I don't know if a germplasm can be licensed?

J. Sherwood – In your motion you are calling it a sorghum line so that is what we need to vote on.

Vote: 12 for, 2 for in absentia, 0 against

Norm Weeden - Moved that Montana State University pea breeding line 37A (MSUPBL37A) high-amylose yellow dry pea be approved for release in 2015.

R. Larson – Seconded the motion.

N. Weeden – This is my best yielding high-amylose yellow pea. It is more erect and slightly later than the similar line B10-10 that was released previously. Even though this is a yellow pea, this variety has some seed that have a greenish testa color. The cotyledon itself is yellow. The greenish color should not affect the color and quality of the flour providing the testa is removed before milling. It is a little taller and has about 5% higher yield than B10-10. Chengci also found out that it has a 10% higher amylose content than B10-10. This is a nice pea for health food market. There are other lines that are up to 29% amylose, but I am not sure how they yield.

K. Kephart – I am curious about the seed color because it is controlled by a single gene.

N. Weeden – The green is in the testa, and we don't know the genetic basis of this character. I am not sure if it is a little later maturing or maybe some of the seeds don't fully bleach.

B. Mahurin – How much seed do you have?

N. Weeden – About 100 lbs.

W. Grey – I am concerned about the green seed variation from a production perspective. It needs to be very tightly controlled with a very specific license agreement and only produced under certain conditions.

N. Weeden – The pea itself is yellow and wrinkled, two characteristics, so I don't think it will be a problem. But the inconsistency of the testa color may make the grower think he is getting a mix so we need to be up front about that.

D. Gettel – This would be for a niche market.

N. Weeden – Yes, they would need to put together a market for it.

B. Mahurin – We have had more solicitations regarding peas than any other crop.

Vote: 12 for, 2 for in absentia, 0 against

David Weaver moved to close the meeting.

M. Burrows – seconded the motion

Vote: 16 for, 0 against

Following the meeting there was a discussion led by D. Wichman concerning alternative methods for releasing triticale lines.