



DATE: January 23, 2012
TO: Variety Release and Recommendation Committee Members
FROM: John Sherwood, Chair
RE: 2012 Minutes and Committees
Chair: John Sherwood, Department Head PSPP
Secretary: Irene Decker, Administrative Assistant, PSPP

Present: John Sherwood, David Weaver, Phil Bruckner, Darrin Boss, David Wichman, Joe A. Smith, Bob Stougaard, Joyce Eckhoff, Craig Cook, Norm Weeden, Chengci Chen, Ken Kephart, Melvin Goffena, Heather Rimel, Ron Larson, Luther Talbert, Bill Grey, Rod Kitto, Jim Jacobs, Joe Scianna, Mike Giroux, Duke Pauli, Jay Kalous, Stan Bates, Bill Hoch, David Gettel, Dale Clark, Mary Burrows, Becky Mahurin, Nancy Blake, Susan Lanning, Toby Day and Kent McVay.

Not in attendance: Bret Nedens, Mike Davis, Kevin Bradley, and Mal Westcott. Toby Day filled in for Tracy Dougher (Horticulture and Native Plants Committee), Mike Giroux filled in for Norm Weeden (Specialty Crop Committee), Perry Miller and Fabian Menalled submitted their votes to John Sherwood.

Agenda

1. Approval of 2011 Minutes Variety Release and Recommendation Committee(s)
2. Discuss and vote on the motions put forth by the following committees in the order given: Wheat, Barley Forage, Specialty, and Horticulture and Native Plants

WHEAT

Phil Bruckner and Jim Berg

Motion: That Morgan, Neeley, Rocky, and Wahoo be removed from the Montana Winter Wheat Cultivar recommended list due to: 1) lack of certified seed production in Montana, 2) declining and/or negligible grain production in Montana, 3) superior performance by other available winter wheat cultivars, and 4) lack of future performance data since these cultivars are no longer being tested in Montana winter wheat performance trials.

Motion: That MTCL1067 and MTCL1077 two-gene-Clearfield hard red winter wheats be approved for licensed release in 2012, contingent upon approval of crop herbicide tolerance reaction by BASF.

Crop Science

Entomology

Horticulture

Plant Biology

Plant Genetics

Plant Pathology

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Craig Cook

Motion that WB-Quake be recommended as a hard red winter wheat for districts 1-6 in Montana.

Luther Talbert and Susan Lanning

Motion: To remove Conan from the Montana Spring Wheat Recommendation List.

Motion: To remove Freyr from the Montana Spring Wheat Recommendation List.

Motion: To release Imicht79, hard red spring wheat.

Motion: To add Imicht79 to the Montana Hard Red Spring Wheat Recommendation List for districts 2-6 under dryland conditions where the wheat stem sawfly is a problem (effective February, 2012).

Motion: To add Duclair to the Montana Hard Red Spring Wheat Recommendation List for dryland areas in districts 2-6 (effective February, 2012).

Motion: To add Brennan to the Montana Hard Red Spring Wheat Recommendation List for districts 1 and 5 on dryland and district 6 under irrigation (effective February, 2012).

Motion: To add Sy Tyra to the Montana Hard Red Spring Wheat Recommendation List for both dryland and irrigated areas in districts 1-6. (effective February, 2012).

Joyce Eckhoff

Motion: That MT 03012 durum wheat be approved for release in 2012.

SPECIALTY CROP

Norm Weeden

Motion: That Montana State University pea breeding line B10-10 (MSUPBLB10-10) high-amylose yellow dry pea be approved for release in 2012.

J. Sherwood – Is there a motion to approve minutes from 2011 Variety Release meeting?

D. Wichman - Moved to approve the minutes from the 2011 meeting.

R. Larson – Seconded the motion

Vote: 13 for, 0 against

2012 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 Luther Talbert-winter	Breeder	PSPP Head
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 – absent	Weed Scientist	LRES Head
7. Perry Miller - absent	Cropping systems	LRES Head
8. David Weaver	Entomologist	LRES Head
9. Darrin Boss		NARC Superintendent
10. Dave Wichman		CARC Superintendent
11. Dave Wichman		WTARC Superintendent
12. Bob Stougaard		NWARC Superintendent
13. Joyce Eckhoff		EARC Superintendent
14. Ken Kephart		SARC Superintendent
15. Brett Nedens - absent	Chair	MAES Advisory Board
16. Melvin Goffena		Montana Wheat and Barley Comm.
Ex-officio Becky Mahurin	Dir. Technology Transfer	V.P. for Research, Creativity and Technology Transfer

WHEAT

Phil Bruckner - Moved that Morgan, Neeley, Rocky, and Wahoo be removed from the Montana Winter Wheat Cultivar recommended list due to: 1) lack of certified seed production in Montana, 2) declining and/or negligible grain production in Montana, 3) superior performance by other available winter wheat cultivars, and 4) lack of future performance data since these cultivars are no longer being tested in Montana winter wheat performance trials.

Bob Stougaard – Seconded the motion

P. Bruckner – We checked with Westbred on Morgan and they approved removal from the recommended list.

Vote: 12 for and 0 against

Phil Bruckner – Moved that MTCL1067 and MTCL1077 two-gene-Clearfield hard red winter wheats be approved for licensed release in 2012, contingent upon approval of crop herbicide tolerance reaction by BASF.

D. Wichman – Seconded the motion

P. Bruckner – These lines are both two gene Clearfield lines in a ‘Yellowstone’ background. Both were selected in 2009. Progress has been very fast to get them to this point. There is plenty of field data. These lines were tested in conventional and herbicide-treated trials since parent and check Yellowstone is susceptible to imidazolinone herbicides and can’t be used as a check in herbicide treated trials. Data shows that both lines are similar in performance and quality to recurrent parent Yellowstone, except that MTCL1067 is earlier and taller than Yellowstone. Both lines are significantly higher in yield in Montana than AP503 CL2 which is currently the only available 2 gene-Clearfield winter wheat variety.

J. Smith – What time frame are we looking at?

P. Bruckner - We need to complete crop tolerance data and submit it to BASF for approval. We need crop injury data 2 to 4 weeks after herbicide application.

J. Sherwood - How long does the approval process take?

P. Bruckner - Once we have the data, about a 2-3 week turnaround. We plan to have approval for release from BASF by fall planting of this year.

J. Sherwood – Is Foundation Seed aware of this?

B. Grey – We have planted MTCL1077 and MTCL 1067 for seed production.

B. Stougaard – In table 3a, there is no data for Kalispell.

P. Bruckner – MTCL1067 was identified a year earlier than MTCL 1077. MTCL1077 was only in the advanced trial in 2011 which Kalispell does not grow, so that is why there is no Kalispell data for it. Tables 2 and 4a have Kalispell data in them.

B. Stougaard – 4a is the average of two years?

P. Bruckner – Yes, there were three 2010 sites and sixteen 2011 sites. There is a table that compares the two where they were in common trials.

B. Grey - MTCL1067 is earlier and taller than Yellowstone. How different is it from MTCL1077 in respect to those two characteristics?

P. Bruckner – MTCL1067 is about 1.5 days earlier than MTCL1077 and 2.5 inches taller. Yellowstone is plenty tall on its own so this is not necessarily an advantage.

J. Sherwood – Phil wants both of these approved for release in this meeting and licensee could pick which one of the two they want to license.

B. Mahurin – They can choose one or both. I won’t determine this; the License Release Committee will determine this.

P. Bruckner – Both Westbred and Syngenta had the opportunity to put these lines in their 2011 trials. Did you put them in your trials Joe?

J. Smith – Yes, in three sites in North Dakota

D. Wichman – Could we sell them both?

J. Sherwood – The purpose of this committee is to decide whether or not to release these varieties.

B. Grey – How is their disease resistance?

P. Bruckner – They appear to have more stem rust resistance than their parent – Yellowstone.

D. Clark – The source of their second herbicide resistance gene is CDCTeal, which is Canadian spring wheat.

P. Bruckner – As far as stripe rust, both lines have good resistance. Kalispell stripe rust was very severe. MTCL1067 was superior to MTCL1077 at Kalispell; USDA data from Washington state indicates both lines have similar stripe rust resistance to Yellowstone.

P. Bruckner - Repeated motion.

Vote – 12 for, 0 against

Phil Bruckner - Moved that WB-Quake be recommended as a hard red winter wheat for all districts of Montana.

D. Weaver – Seconded the motion.

C. Cook – The data all looks pretty good. This is the first solid stem winter wheat variety Westbred has released. Are there any comments on specific districts?

P. Bruckner – There is a lot more data than what has been presented. WB Quake seems to be similar in performance to what they have seen in Judee. Quake may not be a good choice if sawfly is not a problem.

J. Eckhoff – There is not much winter wheat grown in our district. There are terrible sawfly problems. If someone wants to grow it, they will grow it.

J. Sherwood - Table 3 does not say much since there was not much sawfly damage even with the controls. Does it actually perform well when sawfly is a problem?

C. Cook – Yes.

P. Bruckner - In our 2011 off-station trial at Loma, sawfly cutting of Quake was 15% compared to 22% in Genou and 10% in Judee. At Turner, sawfly cutting in

Quake was 2% compared to 7% in Genou and 1% in Judee. Sawfly cutting of most of the hollow stem lines averaged about 30% at Turner and 20% at Loma. Our data indicates WB Quake has pretty good stem solidness.

Vote – 12 in favor, 0 against

Luther Talbert – Moved to remove Conan from the Montana Spring Wheat Recommendation List.

D. Wichman – Seconded the motion.

L. Talbert – There are better varieties that have similar traits. Westbred is not selling the seed anymore. Other varieties are being grown.

Vote: 12 for, 0 against.

Luther Talbert – Moved to remove Freyr from the Montana Spring Wheat Recommendation List.

D. Wichman – Seconded the motion.

L. Talbert – There are better varieties that people can grow in those districts.

Vote: 12 for, 0 against.

Luther Talbert – Moved to release Imicht79, hard red spring wheat.

R. Larson – Seconded the motion.

L. Talbert - IMICHT79 originated from a cross where two genes for resistance to the 'imi' herbicides were crossed into Choteau. Several lines were developed, which we tested for two years and selected the best of them. We did a pre-release agreement with Westbred last year. Westbred obtained herbicide resistance data required by BASF, and we were able to get another year of statewide testing in our Advanced Yield Trial. The line is similar to Choteau for stem solidness and sawfly resistance. Yield potential is similar but perhaps a bushel or two less. Test weight and protein are similar to Choteau.

R. Larson – Is this the official name?

Luther – No.

J. Sherwood – Comments?

K. Kephart – Is the license process separate from release process?

J. Sherwood - In reality, yes.

B. Mahurin – This was a unique situation. I am happy to answer any questions.

K. Kephart – Given that it is already licensed, why release the variety as PVP Title 5?

L. Talbert - I don't know.

D. Clark – All Clearfield varieties are required to be PVP Title 5 by BASF.

K. Kephart – We are proposing to release and if we vote to release, MSU has to do PVP process.

J. Sherwood – The license may include Westbred paying for PVP; it is not uncommon for the licensee to pay for PVP costs.

D. Clark - Does it say as long as licensee approves quality data?

K. Kephart – that is up to the licensee.

J. Sherwood – Is it ok with everyone to add “contingent upon approval by BASF”?

D. Clark – We will have all data together this week.

M. Giroux – What is the expectation for acreage?

D. Clark – No one will pay royalty unless they have a weed problem they can't control.

M. Giroux – We don't want to replace Choteau acreage with IMICHT79 as it is not as good as Choteau.

J. Sherwood - Doesn't BASF have rules about how often you can grow a variety?

D. Clark – Two out of four years.

K. Kephart – Why release two lines that have same problem? Our state wide reputation is on line. Clearfield lines will be used wherever. This one could displace more Choteau acres. Should we not release it for that reason? They are going to try to buy this technology whether MSU background or not.

J. Sherwood – There are advantages and disadvantages for Luther.

L. Talbert – Neither one will bring in that much money in the big scheme of things. When looking at the quality data, remember that all varieties are not being compared to random wheat varieties, but are being compared to high quality varieties.

M. Giroux – Clearfield is almost in a separate category.

Vote – 12 for, 0 against

Luther Talbert – Moved to add Imicht79 to the Montana Hard Red Spring Wheat Recommendation List for districts 2-6 under dryland conditions where the wheat stem sawfly is a problem (effective February, 2012), contingent upon approval by BASF, for regions where the Clearfield trait may be useful.

D. Wichman – Seconded the motion.

B. Stougaard – You were recommending this to kill weeds; now you are promoting it for sawfly? It has solid stems as good as Choteau so are you promoting this over Choteau?

D. Clark – We are promoting it in those areas that have grassy weed problems that can't be economically controlled by other herbicides.

L. Talbert – Shall we add this to the motion? We don't have to define herbicides.

K. Kephart – I am in district 3 and we have Choteau recommended as irrigated variety.

B. Grey - What is the recommendation on Choteau? It is grown basically in irrigated and dryland acres.

D. Clark - Other varieties work better in irrigated acres.

P. Bruckner – The stewardship agreement has restrictions.

L. Talbert (changed motion) - Moved to add Imicht79 to the Montana Hard Red Spring Wheat Recommendation List for districts 2-6 under dryland conditions where the wheat stem sawfly is a problem, , for regions where the Clearfield technology may be useful contingent upon approval by BASF .

D. Wichman - Seconded the motion.

Vote – 11 for, 1 opposed (Ken Kephart)

Luther Talbert – Moved to add Duclair to the Montana Hard Red Spring Wheat Recommendation List for dryland areas in districts 2-6 (effective February, 2012).

D. Weaver – Seconded the motion.

L. Talbert – Duclair was released last year and we are recommending it this year. Yield potential on table shows that it is similar to Choteau, solid stem almost the same as Choteau and it is a little taller. Its protein is a little less than Choteau, higher than Vida, and it is easier to thresh than Choteau. It did really well this year (Choteau did better) and last year it had the highest yield. For gluten strength there have been complaints that McNeal was too strong and that Reeder was too

weak. Vida was a little stronger than Reeder, but not quite strong enough so Duclair was selected because it is a little stronger than Vida and Reeder.

B. Grey – It is not recommended for District 1. Is there any particular reason? It seemed to do well in Kalispell.

L. Talbert –It is pretty resistant to stripe rust.

B. Stougaard – It only yielded 30 bushels; 2011 was a serious stripe rust year.

B. Grey – In 2009 and 2010 it was in the top group, but not in 2011.

Susan – Page 17, Table 13 – Duclair yield is in top group behind Reeder.

L. Talbert – I am open to revising motion.

B. Grey – Amend it to include District 1.

L. Talbert - Scratch out the irrigated part.

D. Clark – To be recommended, you need to have at least 16 years of data. You are sticking your neck way out when you don't have data under irrigated conditions.

B. Grey – Do we know how many locations are irrigated?

L. Talbert – Four or five.

K. Kephart – The table shows 17 location years.

L. Talbert – I have not seen it in irrigated areas enough to be confident of its performance.

J. Sherwood – You can always add it in the future when you have more supporting data.

L. Talbert (changed motion) - Moved to add Duclair to the Montana Hard Red Spring Wheat Recommendation List for dryland areas in districts 1-6 (effective February, 2012).

B. Grey – Seconded the motion.

Vote: 12 for, 0 against

Joe Smith – Moved to add Brennan to the Montana Hard Red Spring Wheat Recommendation List for districts 1 and 5 on dryland and district 6 under irrigation (effective February, 2012).

R. Larson –Seconded the motion.

J. Smith – Brennan has been very similar to another AgriPro variety, Kelby. It has maintained many of the good features of Kelby while showing higher yield potential. It has the earliest heading date and near the highest test weight of any line in test. Its protein is high but slightly below Kelby. The overall yield performance has not been comparable to the top yielders but when you take into consideration the other strengths of this variety, it would be a good alternative for Montana growers. On seasons when it turns hot early, early varieties sometimes have an advantage over later varieties. Another interesting note on this variety is the low midge count observed at Creston. Also, it seems to be better than average for stripe rust.

David Weaver – There is a problem with using the term tolerance, which implies that the head could contain many midges but not show any ill effects; what you have is relative resistance by non-preference. In these small plot trials Brennan receives few midges and, for example, Thatcher receives many. You don't know if this is because of Brennan or because they like Thatcher more. So this pattern may not hold up for large planted fields where the insects can't pick among varieties. Thus, just like we did for sawfly in the past, would it be O.K. to use change the wording to reflect the data? Something like "Brennan was consistently one of the least infested or least preferred varieties in small plot trials"....

D. Clark – Do you see Brennan being chosen by the midge over other varieties?

D. Weaver – This word implies that it does not yield lower when there is midge. That is a different word than what is actually happening.

J. Smith – I am ok with the change.

L. Talbert – The data shows that it at about 3.5 bushels up overall in relation to Kelby. Substantially was less than Vida, but it had higher protein and testweight, etc.

Vote – 12 for, 0 against

Luther Talbert - Moved to add SY Tyra to the Montana Hard Red Spring Wheat Recommendation List for both dryland and irrigated areas in districts 1-6. (effective February, 2012).

D. Weaver – Seconded the motion.

J. Smith – I want to thank Luther and his breeding team for this variety. It originated from a marker assisted backcross project between Choteau and Norpro, an AgriPro variety. All of the backcrossing and marker selection work was completed by MSU. AgriPro received BC4F2 seed in 2005 and continued selection for solid stem until pure lines were achieved. After screening many selections from this group, we identified two lines that were entered into MSU trials in 2009. One of which became SY Tyra. This line has some stem solidness and has shown reduced sawfly cutting compared to hollow stemmed varieties. The strengths of SY Tyra are high yield potential and high test weight. Its yield has been very

similar to Vida with one pound heavier test weight. Our concerns are low protein, .4% lower than Vida, and its shorter height.

L. Talbert – It is similar to Norpro; it has fairly strong gluten, table 19. It is a little better even though the protein percentage is lower.

J. Smith – Since the project originated with MSU, we would want something to come back to the university.

L. Talbert – Backcrossed to several varieties and only a few varieties retained much solidness.

D. Weaver – In looking at the sawfly data; it performs better than expected based on stem solidness; it gets cut less than expected. Please change the orange wheat blossom midge language again – same as for the last motion.

Did we restate the motion adding the different language of less preference by sawfly or midge?

Vote – 11 for, 1 opposed (D. Wichman)

Joyce Eckhoff - Moved that MT 03012 durum wheat be approved for release in 2012.

D. Wichman – Seconded the motion.

J. Eckhoff – This line was selected from populations from Arizona. It is a blend of several populations. We grew it in our greenhouse again last year. We compared it to Mountrail because that is the number one durum in the state. When we removed the irrigated sites, there was no difference between Mountrail and MT03012. MT03012 had half a bushel per acre greater yield than Mountrail and it had 1% lower protein than Mountrail. It matured 3.7 days earlier than Mountrail, the stems were more solid than Mountrail and it had better gluten strength than Mountrail.

P. Bruckner – Are you increasing seed yet?

J. Eckhoff – We have about 300 lbs of seed.

M. Goffena – European customers are looking for low cadmium so posthaste!

J. Eckhoff – I do have a low cadmium lines that I am starting in yield trials next year. I understand that that is a very important thing.

P. Bruckner - Is shortness an advantage or disadvantage for dryland?

J. Eckhoff – Growers like short varieties sometimes because not as much straw left over. Growers have to decide.

Vote – 12 for, 0 against

Specialty Crop Variety Release Committee		
<i>Voting Members, 16</i>	<i>Affiliation</i>	<i>Appointing Administrator</i>
<i>Chair, John Sherwood</i>	<i>PSPP Head</i>	<i>Director MAES</i>
1. Bill Hoch	Breeder	PSPP Head
2. Mike Giroux	Breeder	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-absent	Weed Scientist	LRES Head
7. Perry Miller-absent	Cropping systems	LRES Head
8. David Weaver	Entomologist	LRES Head
9. Darrin Boss		NARC Superintendent
10. Dave Wichman		CARC Superintendent
11. Dave Wichman		WTARC Superintendent
12. Bob Stougaard		NWARC Superintendent
13. Joyce Eckhoff		EARC Superintendent
14. Kent McVay		SARC Superintendent
15. Brett Nedens	Chair	MAES Advisory Board
16. Mal Westcott - absent		WARC Superintendent
Ex-officio Becky Mahurin	Dir. Technology Transfer	V.P. for Research, Creativity and Technology Transfer

SPECIALTY CROP

Norm Weeden - Moved that Montana State University pea breeding line B10-10 (MSUPBLB10-10) high-amylose yellow dry pea be approved for release in 2012.

D. Weaver – Seconded the motion

N. Weeden – this is an improvement over our previous release. It has a yellow pea rather than green pea. Flour from this makes reasonable pasta. It is high yielding in the Gallatin Valley region. This year’s crop in Moccasin and Richland produced less than in the Gallatin valley. The yield in Delta (one of the parents of B10-10) parallels this trend. As a high-amylose pea, B10-10 has a slow release of sugar so it is good for diabetics. It also has been one of the best lines we have had out at the hort farm. It stands well and is easy to harvest as the pods are on top of the plant.

C. Chen – Only one year’s data?

N. Weeden – There are no comparative yield data at the Hort Farm for 2010. It may be premature to release it as I don’t know how it will grow at different sites. A company is interested in it now so thought I would push it along. I have tested it for three years at the Hort Farm although data are not available for 2009 and 2010. The starch in B10-10 is about 70% compared to around 40% for the low-

amylose lines (such as Delta). Protein is also slightly higher (25%) than in low-amylose lines (23%).

J. Sherwood - how many site years and data are required for specialty crops. Is this not an issue with us approving this now?

D. Wichman – Two years of data are needed for specialty crops - one location and three cropping seasons.

B. Grey – The variety release policy officially says that a specialty crop release must have three cropping seasons and one location.

J. Sherwood - Let's vote on it and if it is an issue, we can pull it.

D. Wichman – How much seed is there?

N. Weeden – About 50 lbs.

J. Sherwood – This needs to go through this committee before the license release committee can act on it. Let's vote if no other discussion.

D. Wichman – It is better than Amigo and we released that.

N. Weeden– It stands up better too.

Vote – 10 for, 0 against

D. Wichman – Move to adjourn.

D. Weaver – Seconded the motion

Vote: 13 for, 0 against

2012 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 Luther Talbert-winter	Breeder	PSPP Head
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	Weed Scientist	LRES Head
7. Perry Miller	Cropping systems	LRES Head
8. David Weaver	Entomologist	LRES Head
9. Darrin Boss		NARC Superintendent
10. Dave Wichman		CARC Superintendent
11. Dave Wichman		WTARC Superintendent
12. Bob Stougaard		NWARC Superintendent
13. Joyce Eckhoff		EARC Superintendent
14. Ken Kephart		SARC Superintendent
15. Brett Nedens	Chair	MAES Advisory Board
16. Melvin Goffena		Montana Wheat and Barley Comm.
Ex-officio Becky Mahurin	Dir. Technology Transfer	V.P. for Research, Creativity and Technology Transfer

Barley and Oats 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	Breeder	PSPP Head
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	Weed Scientist	LRES Head
7. Perry Miller	Cropping systems	LRES Head
8. David Weaver	Entomologist	LRES Head
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11. Dave Wichman		WTARC Superintendent
12. Bob Stougaard		NWARC Superintendent
13. Joyce Eckhoff		EARC Superintendent
14. Ken Kephart		SARC Superintendent
15. Brett Nedens	Chair	MAES Advisory Board
16. Melvin Goffena 16. Mike Davis	Barley Feed Barley Malt	Montana Wheat and Barley Comm. American Malting Barley Association
Ex-officio Becky Mahurin	Dir. Technology Transfer	V.P. for Research, Creativity and Technology Transfer

Forage Crop Variety Release Committee		
<i>Voting Members, 16</i>	<i>Affiliation</i>	<i>Appointing Administrator</i>
<i>Chair, John Sherwood</i>	<i>PSPP Head</i>	<i>Director MAES</i>
1. Norm Weeden	Breeder	PSPP Head
2. Larry Holzworth	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	Weed Scientist	LRES Head
7. Perry Miller	Cropping systems	LRES Head
8. David Weaver	Entomologist	LRES Head
9. Darrin Boss		NARC Superintendent
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11. Dave Wichman		WTARC Superintendent
12. Bob Stougaard		NWARC Superintendent
13. Joyce Eckhoff		EARC Superintendent
14. Ken Kephart		SARC Superintendent
15. Brett Nedens	Chair	MAES Advisory Board
16. Joe Scianna		Bridger Plant Materials Center Manager
Ex-officio Becky Mahurin	Dir. Technology Transfer	V.P. for Research, Creativity and Technology Transfer

Specialty Crop Variety Release Committee		
<i>Voting Members, 16</i>	<i>Affiliation</i>	<i>Appointing Administrator</i>
<i>Chair, John Sherwood</i>	<i>PSPP Head</i>	<i>Director MAES</i>
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13. Joyce Eckhoff		EARC Superintendent
14. Kent McVay		SARC Superintendent
15. Brett Nedens	Chair	MAES Advisory Board
16. Mal Westcott		WARC Superintendent
Ex-officio Becky Mahurin	Dir. Technology Transfer	V.P. for Research, Creativity and Technology Transfer

Horticulture and Native Plants Variety Release Committee

<i>Voting Members, 16</i>	<i>Affiliation</i>	<i>Appointing Administrator</i>
<i>Chair, John Sherwood</i>	<i>PSPP Head</i>	<i>Director MAES</i>
1. Bill Hoch	Horticulturist	PSPP Head
2. Toby Day	Horticulturist	PSPP Head
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10. Dave Wichman		CARC Superintendent
11. Dave Wichman		WTARC Superintendent
12. Bob Stougaard		NWARC Superintendent
13. Joyce Eckhoff		EARC Superintendent
14. Ken Kephart		SARC Superintendent
15. Brett Nedens	Chair	MAES Advisory Board
16. Joe Scianna		Bridger Plant Materials Center Manager
Ex-officio Becky Mahurin	Dir. Technology Transfer	V.P. for Research, Creativity and Technology Transfer