

2020 Summary and Variety Update

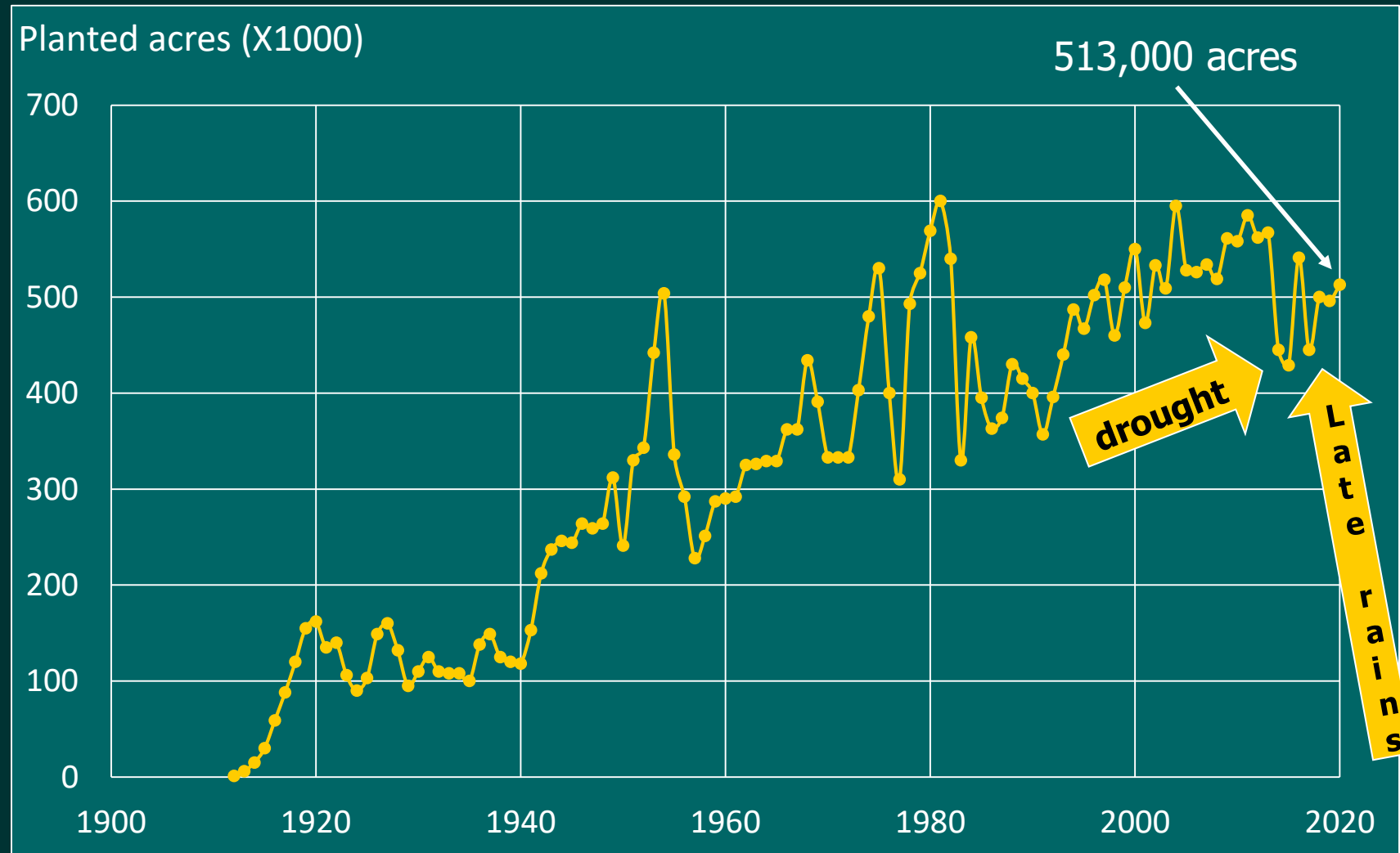


February 11, 2021

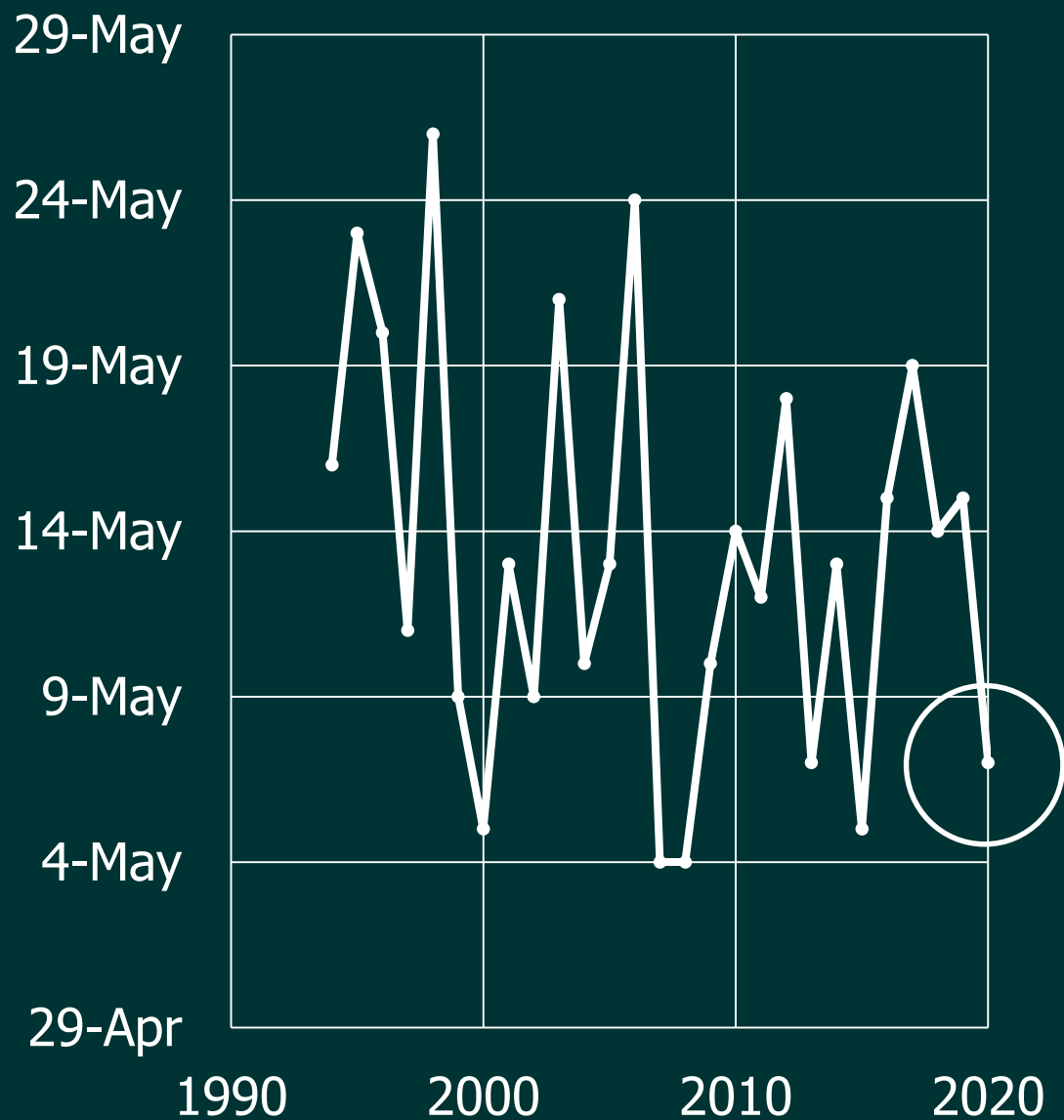
Bruce Linquist



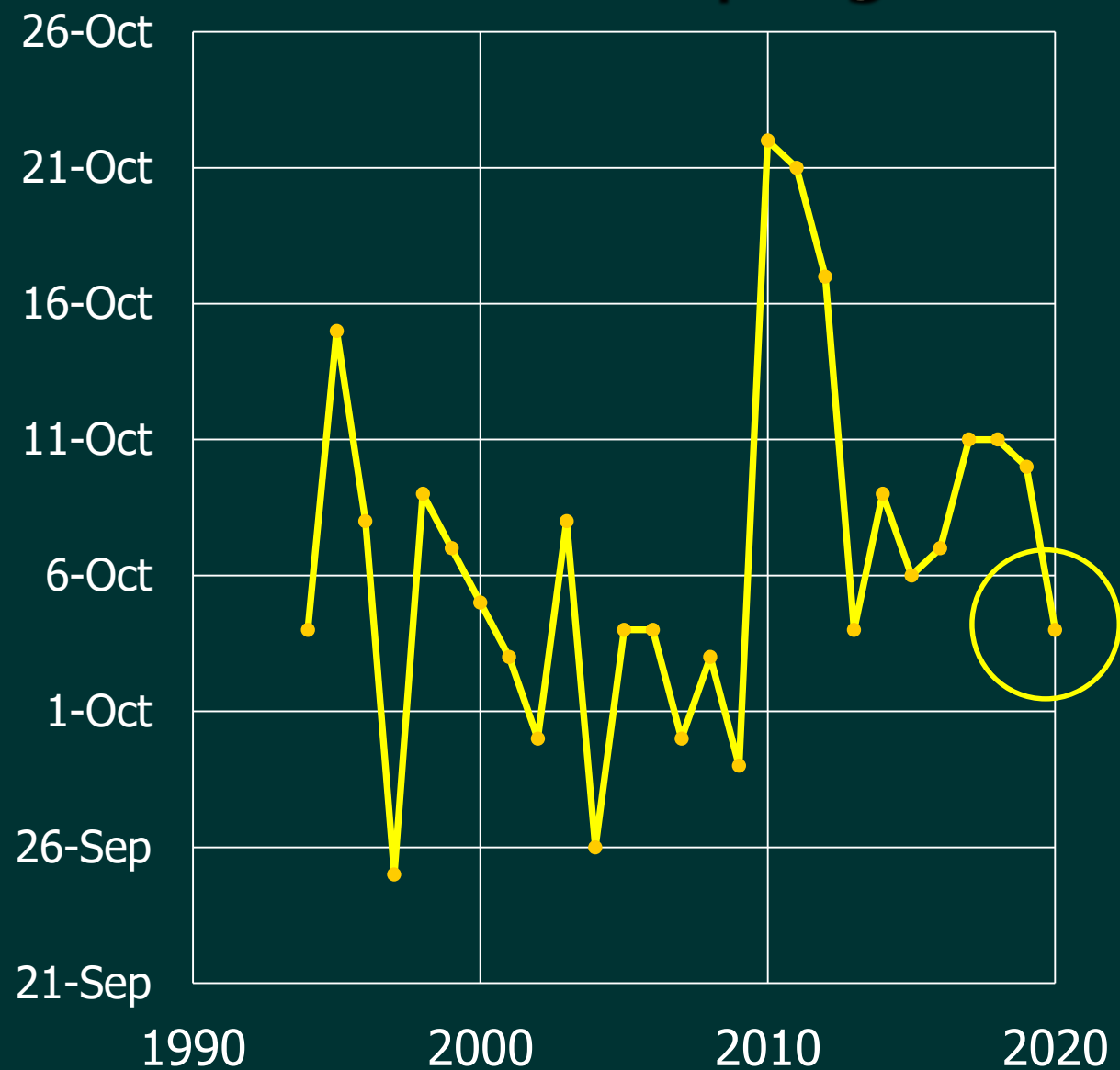
Planted acres



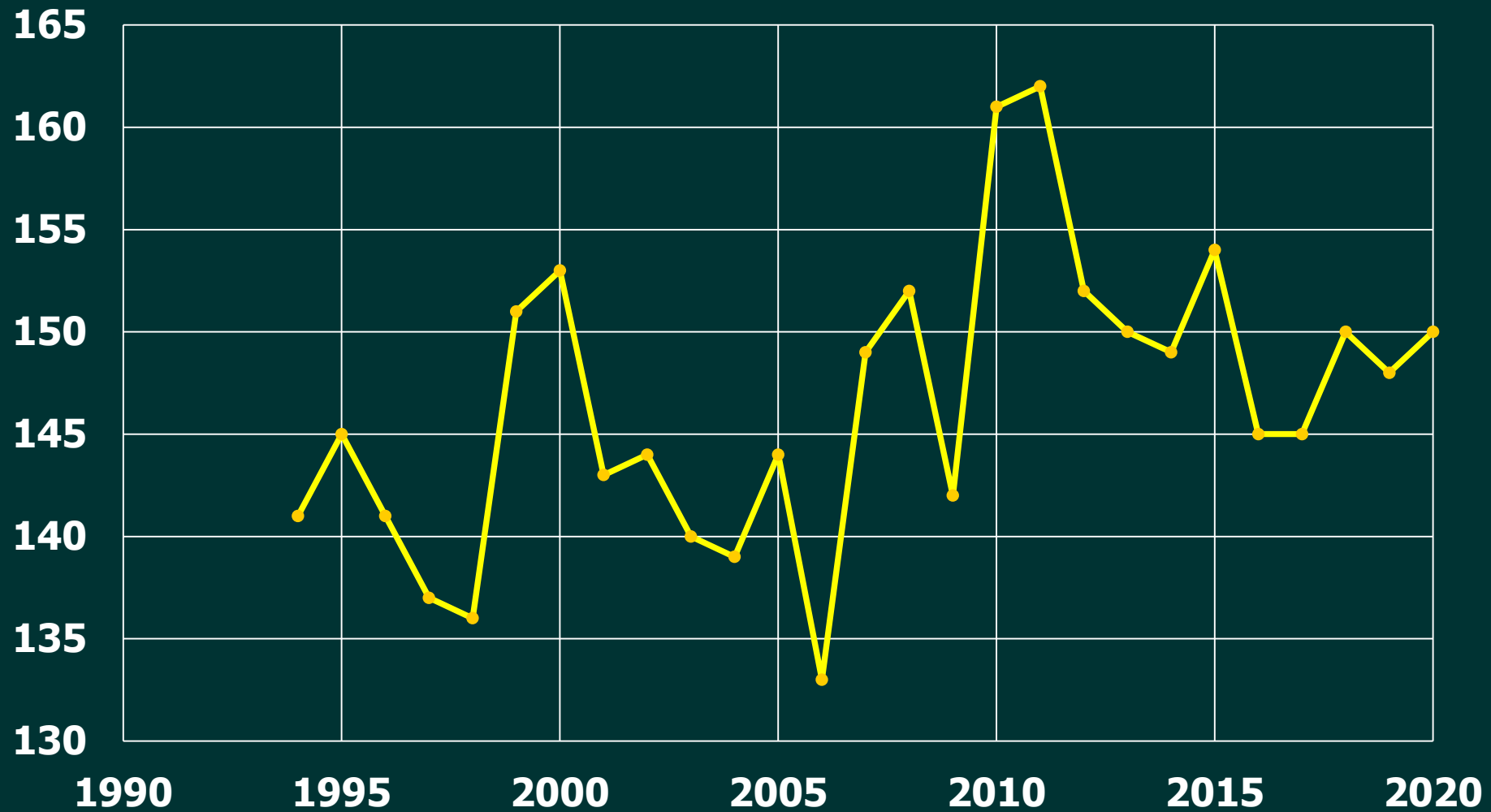
50% planting progress



50% harvest progress



Season length (days)

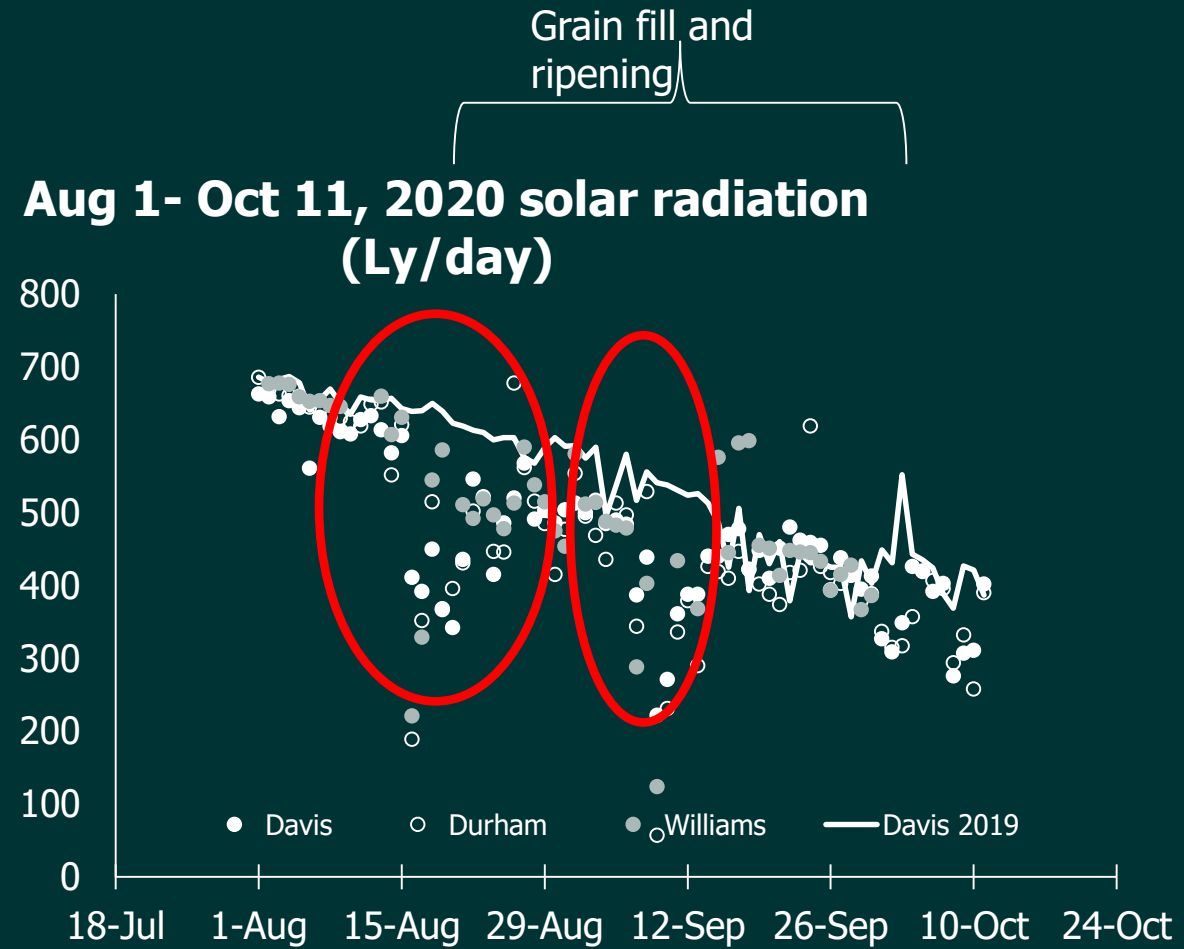


2020 Season

- Early planting (dry spring)
- Aqua-NH₃ supply limited (COVID)
- Blast in NW region (M-205 and M-209)
- Army worm not a big issue
- Wildfires/smoke late season
- Very dry harvest season
- Two periods during harvest of strong N winds (lower grades)

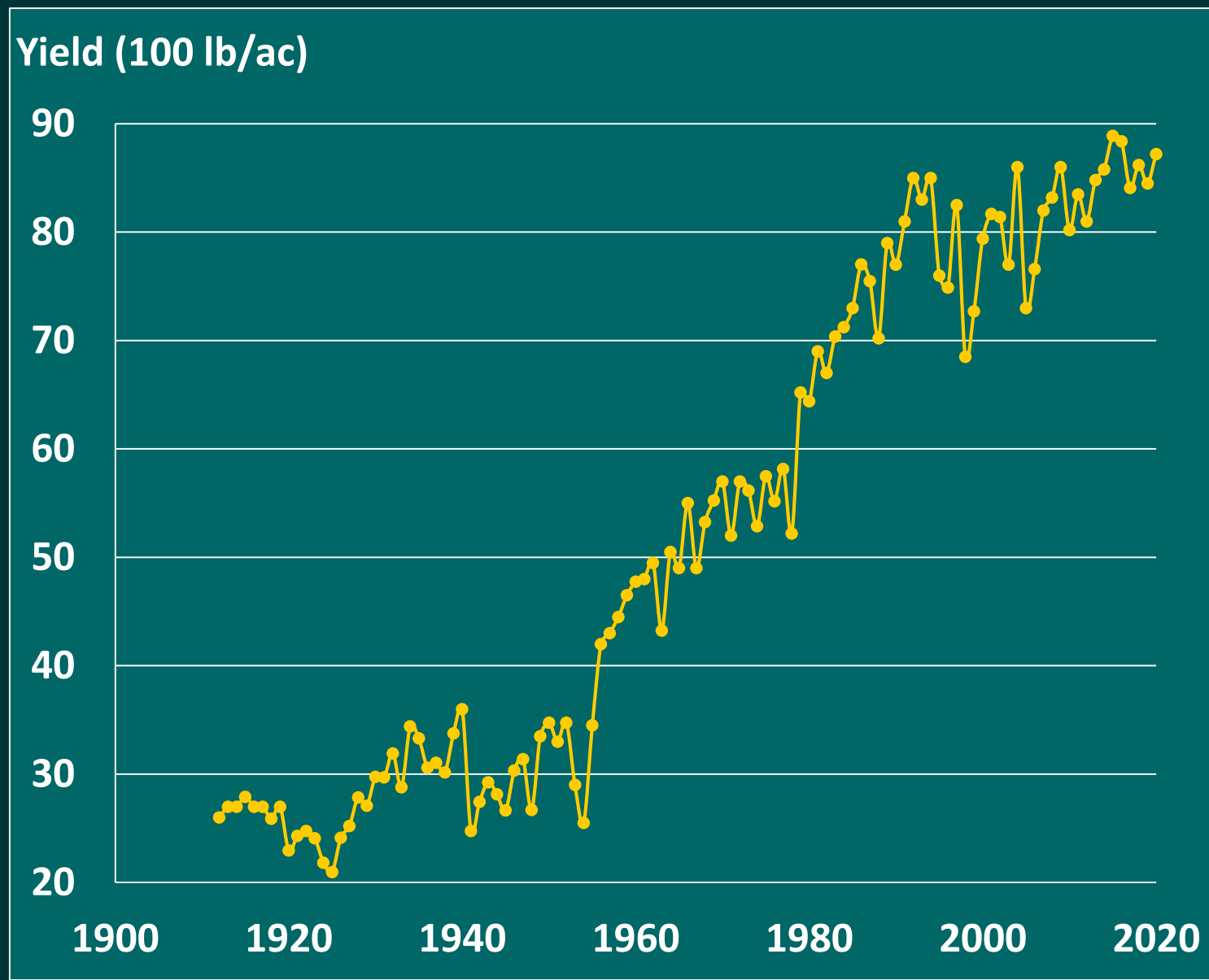
2020 Wildfires

- Smoke from wild fires reduced solar radiation during heading and grain filling.
- Did not appear to have a large effect on yield and quality



California rice yields (1912 to 2020)

- 2020
 - 87.2 cwt/ac
 - 3rd highest yielding year on record for CA





2020 Yield Contest

- 13 fields in contest
- Varieties (field #)
 - M-105 (2)
 - M-206 (1)
 - M-209 (9)
 - M-211 (1)
- Yields
 - Range: 101 to 128 cwt/ac





Yield Contest

- 2020: Yields from 101 to 127.9 cwt
 - NW: 111.4 (248 bu) M-209
 - NE: 127.9 (285 bu) M-211
 - S: 123.5 (275 bu) M-209



Winners will draw for a John Deere Gator.

Thanks to the following sponsors:

BASF
Corteva
FMC
Syngenta
UPL
Valent U.S.A.
Valley Truck & Tractor
Wilbur Ellis

Gary Enos



Eric Sligar



Greg Driver





Newly released varieties perform well



S-202, a very high yielding regular short grain, released in 2019, has consistently out-yielded S-102 across environments in the 2015-20 UC Statewide Yield Tests



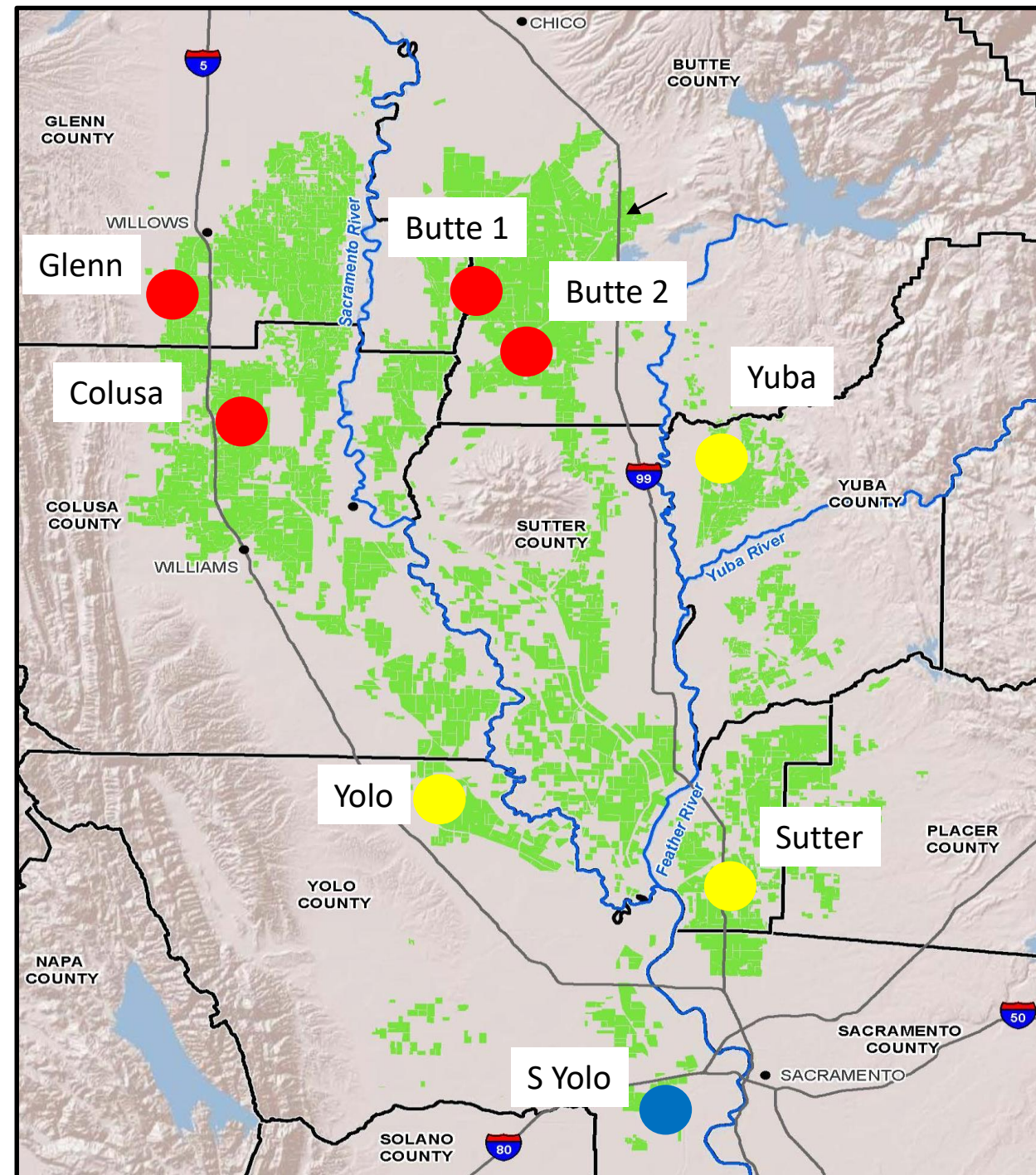
M-211 an early maturing Calrose medium grain with improved taste and cooking quality and higher yield potential than M-209.



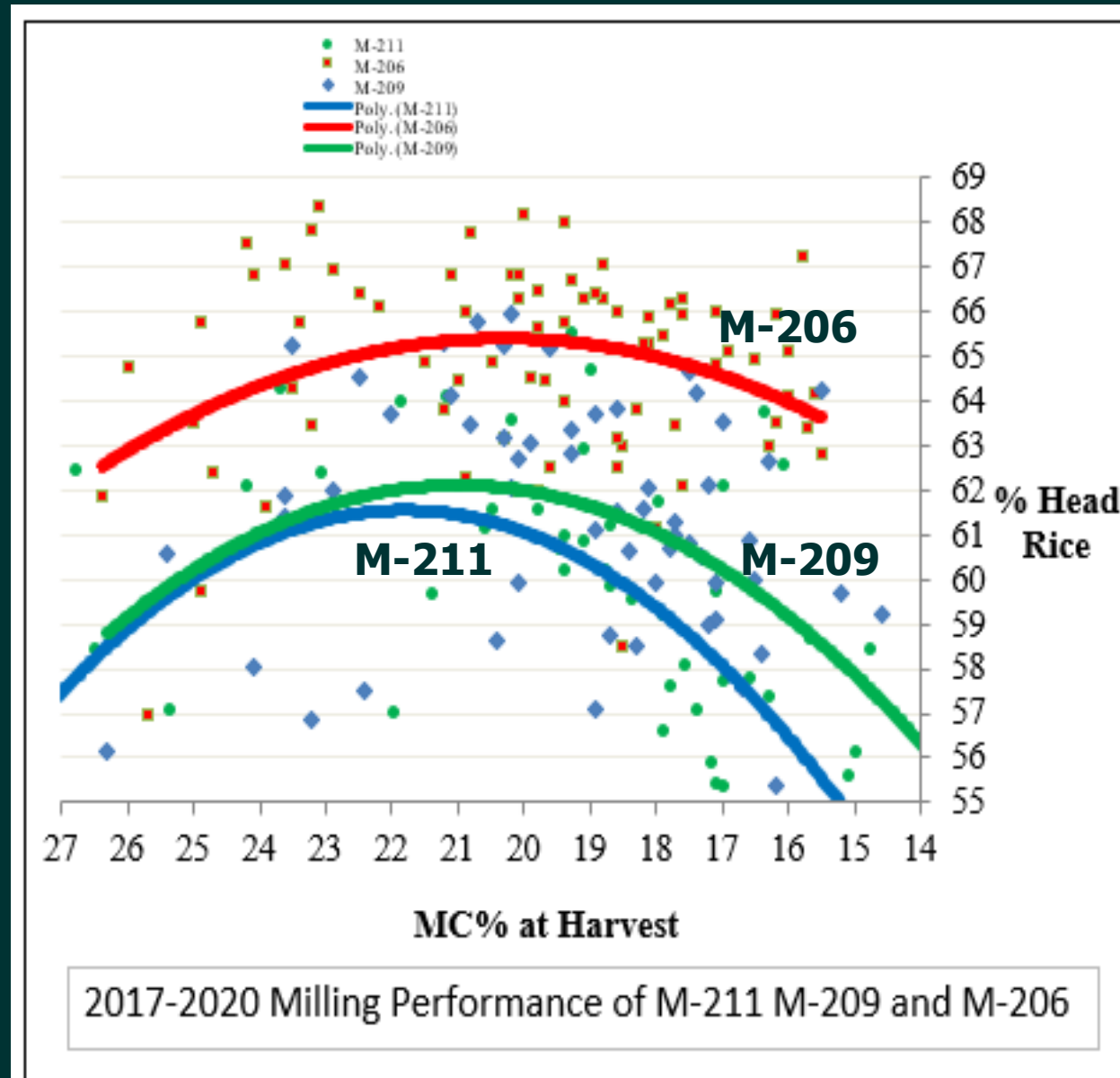
L-208 is a long grain with superior yield compared to L-206 and L-207 and has been in the advanced statewide test since 2015.

Medium grain (M-105, M-206, M-209, M-210 and M-211): 5 year average yield comparison

- Best: M-211 - 4 cwt/ac higher than other varieties
- Best: M-105, M-206, M-210 and M-211
- Poor: M-209
- Best: M-105
- Poor: M-209 and M-211
- M-206 and M-210 similar across environments



Milling Performance of M-211, M-209 and M-206 2017-2020 at RES



Thank you



M-206 VS M-210 yields

Very similar
across sites
and years to
one another

Location	Year	M206	M210
Butte (1)	2016	10400	10270
	2017	9330	9230
	2018	8270	8290
	2019	9520	10020
	2020	9570	8840
Location Mean		9418	9330
Butte (2)	2016	9600	9890
	2017	9650	9650
	2018	10270	9960
	2019	9120	9820
	2020	9490	9660
Location Mean		9626	9796
Colusa	2016	9960	8270
	2017	7530	7910
	2018	8960	8980
	2019	9320	9100
	2020	8820	8950
Location Mean		8918	8642
Glenn	2016	7860	8060
	2017	7140	6530
	2018	9300	9160
	2019	9310	9490
	2020	9500	10240
Location Mean		8622	8696
Loc/Years Mean		9146	9116

Location	Year	M206	M210
Sutter	2016	11110	11340
	2017	9240	9750
	2018	9250	10110
	2019	9370	9300
	2020	9380	9450
Location Mean		9670	9990
Yolo	2016	10980	10080
	2017	8890	8530
	2018	10090	10020
	2019	9120	9050
	2020	9550	9150
Location Mean		9726	9366
South Yolo	2017	7530	6920
	2018	7640	7830
	2019	7780	8740
Location Mean		7650	7830
Yuba	2016	9090	9680
	2017	8770	8830
	2018	9350	9120
	2019	6990	7450
	2020	7920	7800
Location Mean		8424	8576
Loc/Years Mean		8868	8941

2016-2020 rice yields of main varieties: Warm region N of hwy 20

- Overall M-211 has highest yields and among highest yields in all locations
- On average, all of the other varieties perform similar to one another and get about 4 cwt/ac less than M-211

Location	Year	M105	M206	M209	M210	M211
Butte (1)	2016	10060	10400	10220	10270	11250
	2017	8910	9330	9350	9230	10110
	2018	8350	8270	7990	8290	9270
	2019	9820	9520	9260	10020	10060
	2020	10300	9570	10390	8840	10570
Location Mean		9488	9418	9442	9330	10252
Butte (2)	2016	10090	9600	9010	9890	9650
	2017	8930	9650	8480	9650	9130
	2018	9990	10270	9580	9960	10960
	2019	9220	9120	8740	9820	8930
	2020	9640	9490	9630	9660	9910
Location Mean		9574	9626	9088	9796	9716
Colusa	2016	10390	9960	9600	8270	10190
	2017	7390	7530	7850	7910	8680
	2018	8470	8960	9120	8980	9570
	2019	9430	9320	8960	9100	9830
	2020	8850	8820	9040	8950	8760
Location Mean		8906	8918	8914	8642	9406
Glenn	2016	7340	7860	8520	8060	9030
	2017	7520	7140	8200	6530	6950
	2018	9520	9300	9990	9160	10510
	2019	9940	9310	10080	9490	9460
	2020	9170	9500	9550	10240	8660
Location Mean		8698	8622	9268	8696	8922
Loc/Years Mean		9167	9146	9178	9116	9574

2016-2020 rice yields of main varieties: Cool region S of hwy 20 & Yuba

- M-105 has highest yields overall
- M-209 is poorest performer
- M-211 does well except coolest region (S. Yolo)
 - Appears to have a broader adaptability range than M-209
 - Sutter and Yuba counties

Location	Year	M105	M206	M209	M210	M211
Yuba	2016	9110	9090	8760	9680	9230
	2017	8370	8770	9060	8830	9100
	2018	9450	9350	8400	9120	9140
	2019	7170	6990	6650	7450	7070
	2020	7820	7920	7630	7800	8580
Location Mean		8384	8424	8100	8576	8624
Sutter	2016	11630	11110	10710	11340	
	2017	9380	9240	8790	9750	10120
	2018	9540	9250	9090	10110	9920
	2019	9770	9370	9300	9300	10160
	2020	9330	9380	8950	9450	9440
Location Mean		9930	9670	9368	9990	9910
Yolo	2016	10420	10980	9580	10080	
	2017	8550	8890	9130	8530	8390
	2018	10010	10090	9790	10020	10710
	2019	9720	9120	9290	9050	10100
	2020	10990	9550	10010	9150	10110
Location Mean		9938	9726	9560	9366	9828
South Yolo	2017	8590	7530	7280	6920	6740
	2018	8210	7640	7580	7830	7170
	2019	8590	7780	7730	8740	8220
Location Mean		8463	7650	7530	7830	7377
Loc/Years Mean		9179	8868	8640	8941	8935

2016-2020 rice yields of main varieties: Cool region S of hwy 20 & Yuba

- M-105 has highest yields overall
- M-209 is poorest performer
- M-211 does well except coolest region (S. Yolo)
 - Appears to have a broader adaptability range than M-209
 - Sutter and Yuba counties

Location	Year	M105	M206	M209	M210	M211
Sutter	2016	11630	11110	10710	11340	
	2017	9380	9240	8790	9750	10120
	2018	9540	9250	9090	10110	9920
	2019	9770	9370	9300	9300	10160
	2020	9330	9380	8950	9450	9440
Location Mean		9930	9670	9368	9990	9910
Yolo	2016	10420	10980	9580	10080	
	2017	8550	8890	9130	8530	8390
	2018	10010	10090	9790	10020	10710
	2019	9720	9120	9290	9050	10100
	2020	10990	9550	10010	9150	10110
Location Mean		9938	9726	9560	9366	9828
South Yolo	2017	8590	7530	7280	6920	6740
	2018	8210	7640	7580	7830	7170
	2019	8590	7780	7730	8740	8220
Location Mean		8463	7650	7530	7830	7377
Yuba	2016	9110	9090	8760	9680	9230
	2017	8370	8770	9060	8830	9100
	2018	9450	9350	8400	9120	9140
	2019	7170	6990	6650	7450	7070
	2020	7820	7920	7630	7800	8580
Location Mean		8384	8424	8100	8576	8624
Loc/Years Mean		9179	8868	8640	8941	8935