

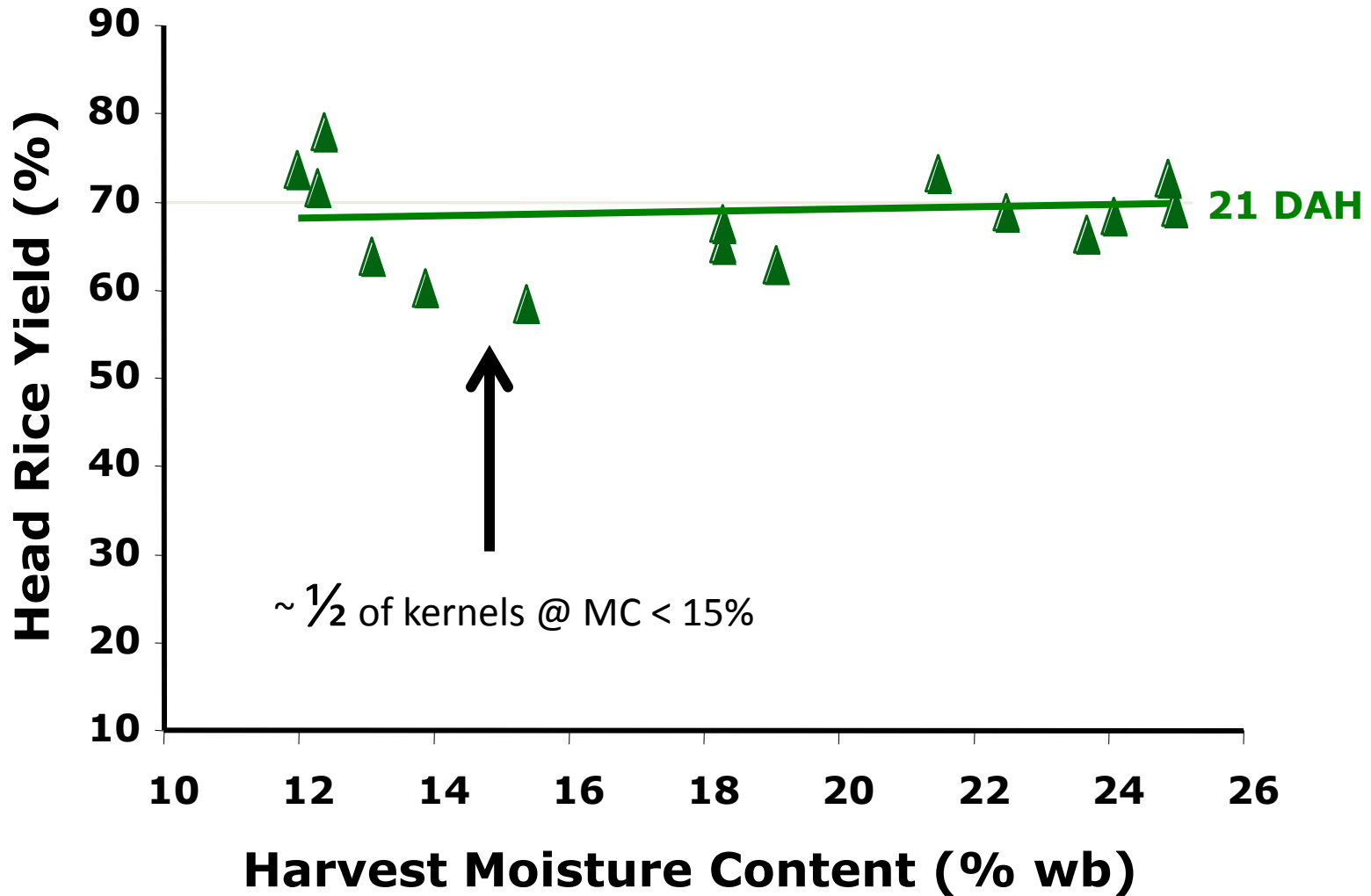
Harvesting at Low Grain Moisture

A Cautionary Tale

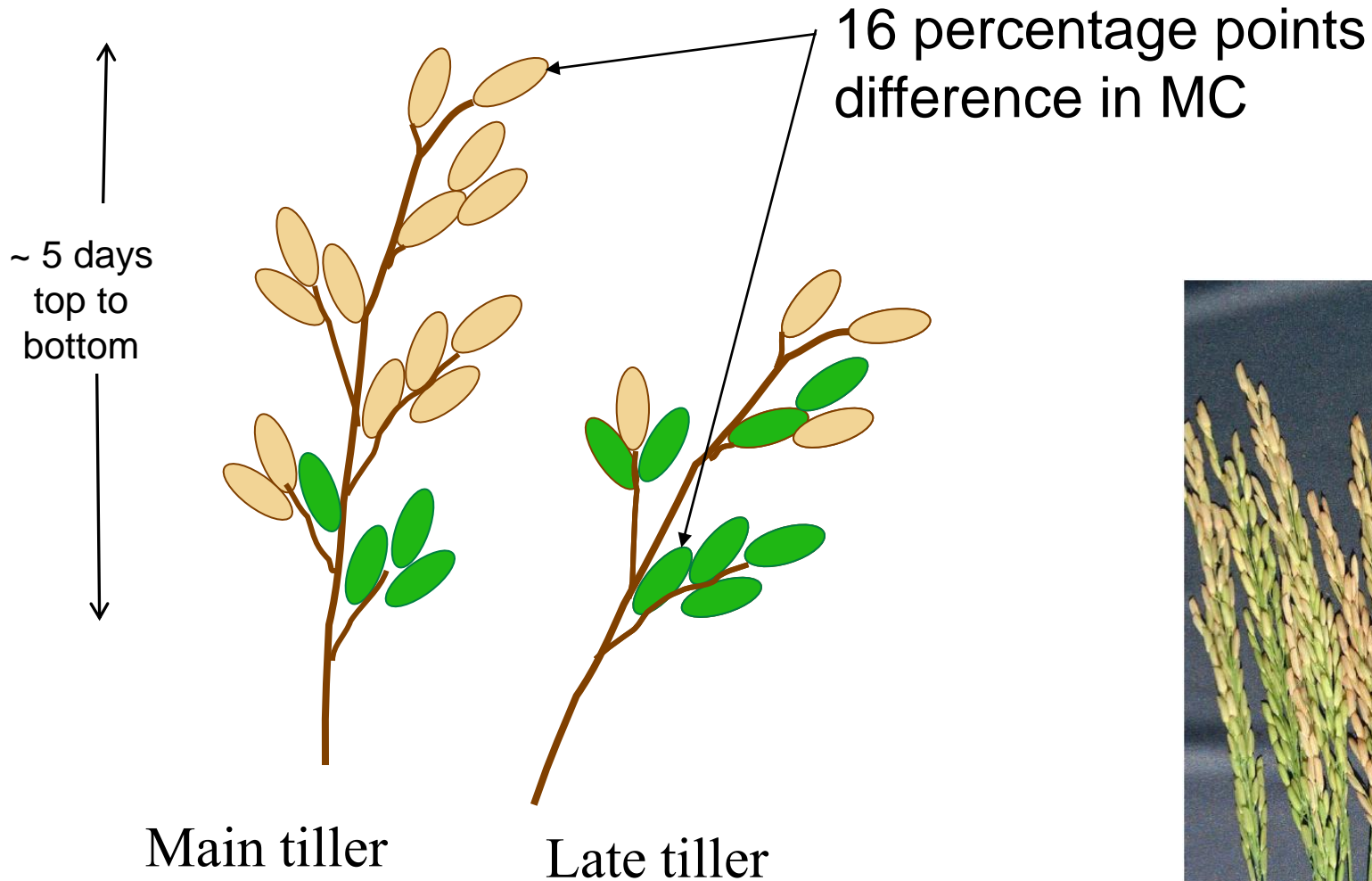


Cass Mutters
2014 CE Rice Growers' Meetings

2010 Harvest - M205

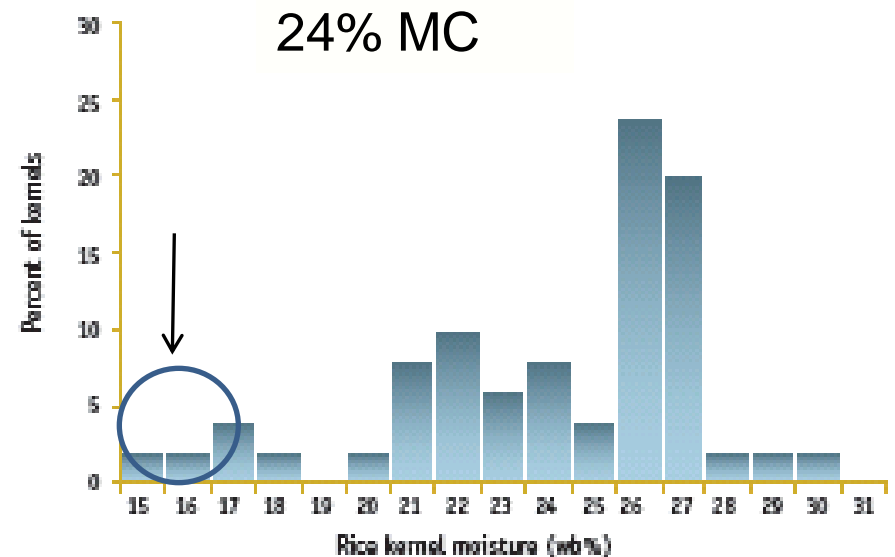


Kernel moisture variability



Fissuring

- Rice fissures when kernels below 16% MC rehydrate because of dew or rain.
- When average MC is about 24% MC, driest kernels are 16%.

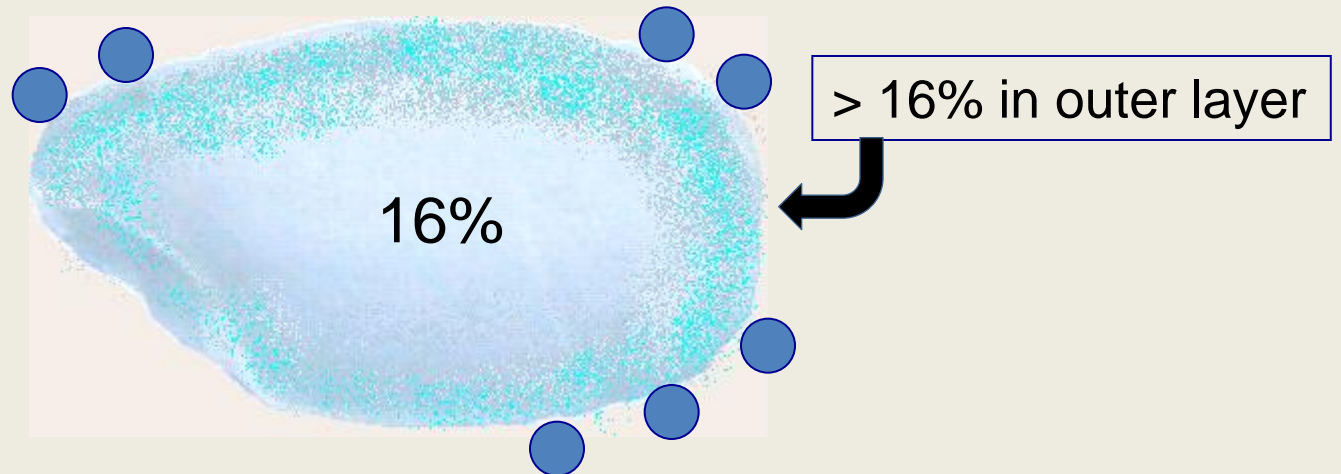


Shifts downward with time

Fissuring

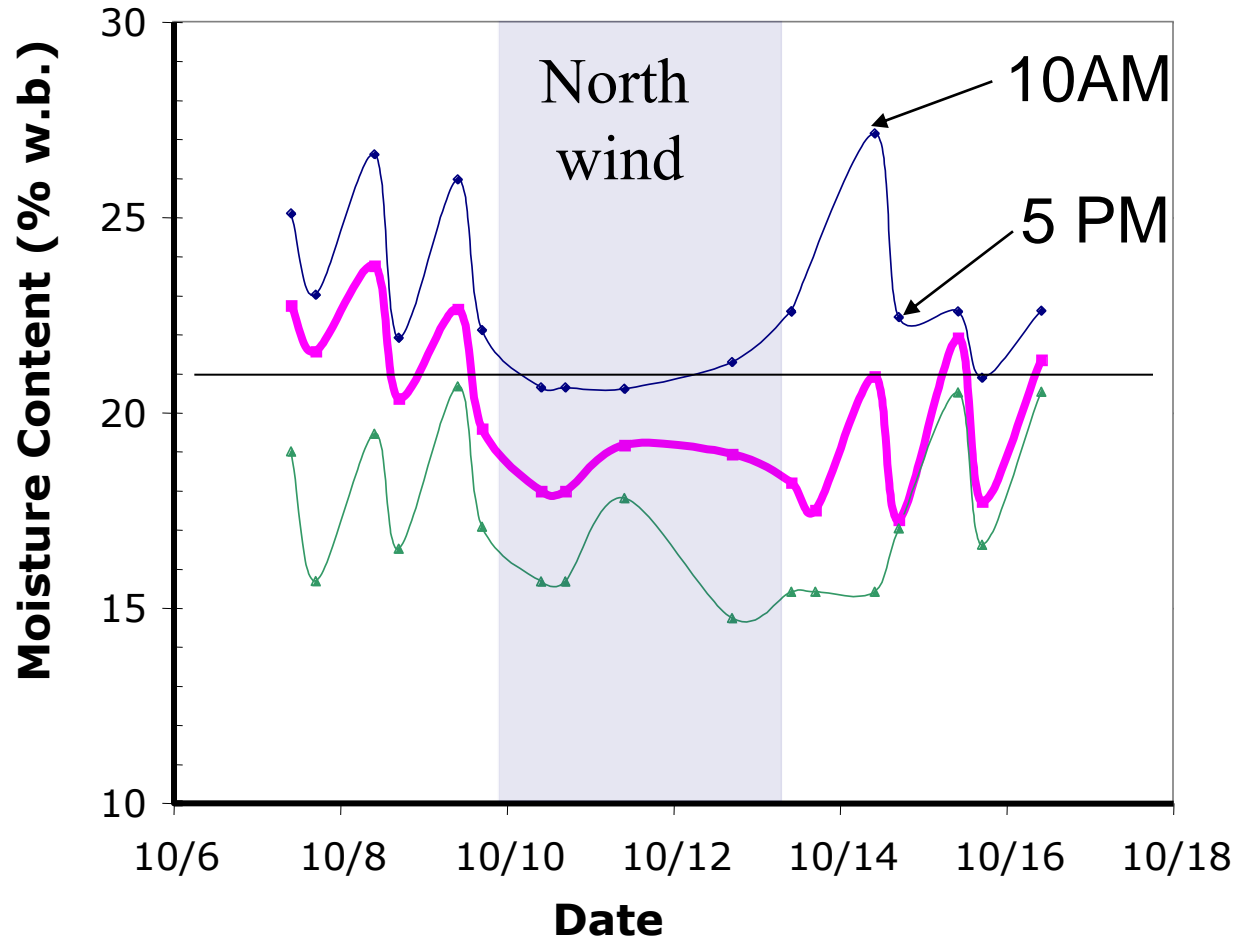
- Rehydration of kernel surface results in differential expansion of outer layer of endosperm.

Endosperm partially rehydrated

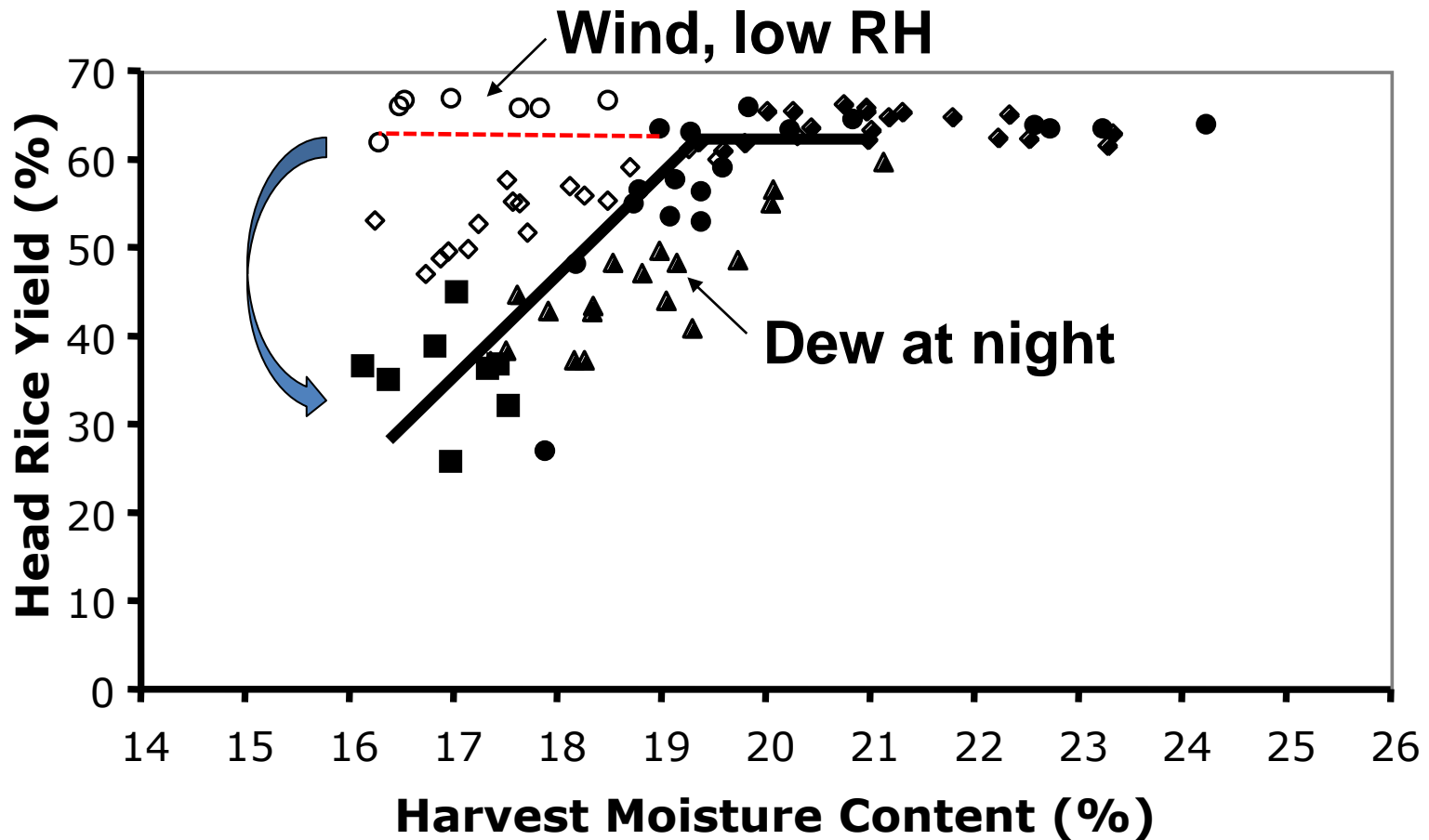


Measure moisture at noon

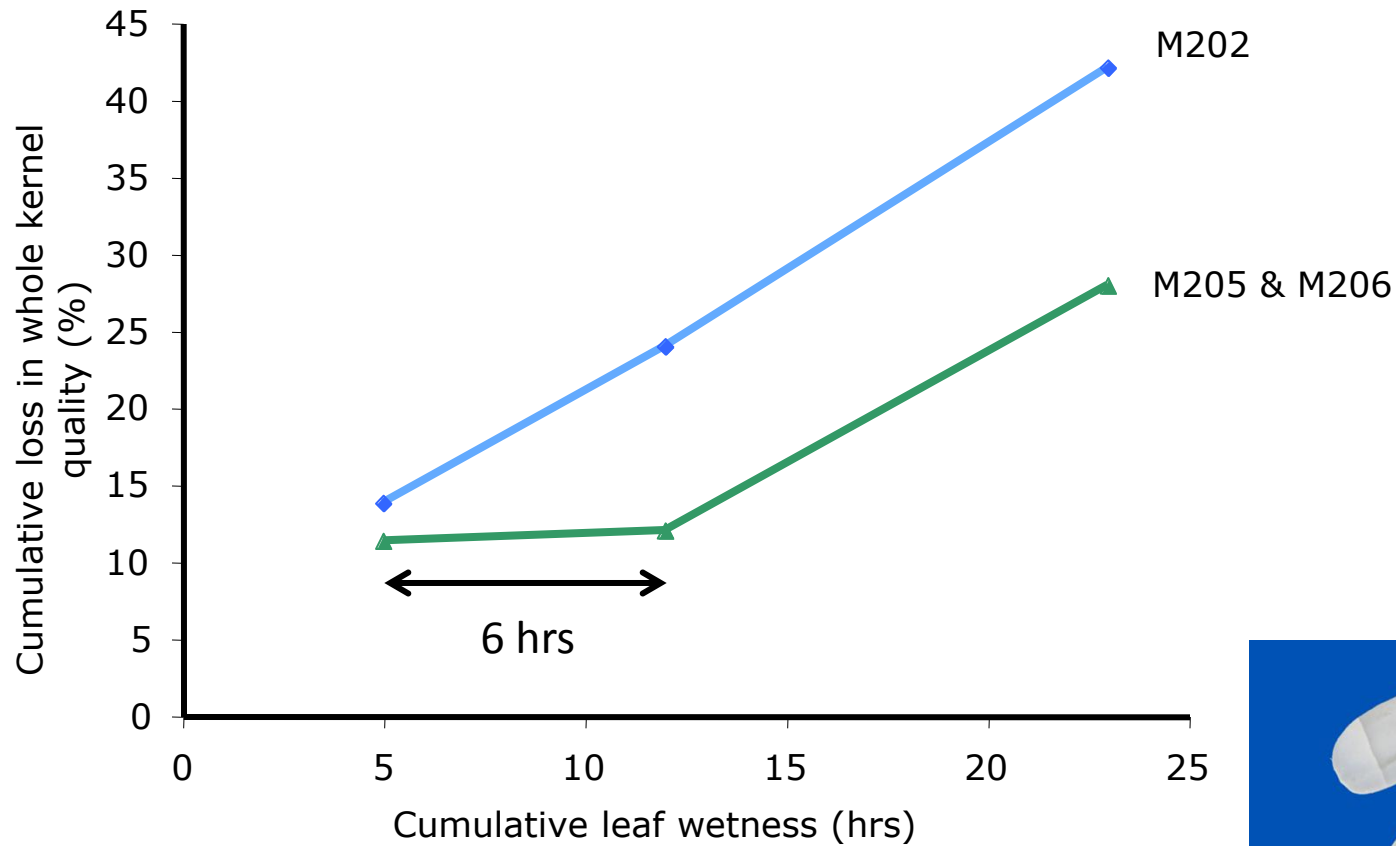
Always sample for moisture at mid day



Medium Grain – M205



Rehydration & HRY Loss



2004 2005 2006 2007 2008 2009 2010 2011 2012 2013

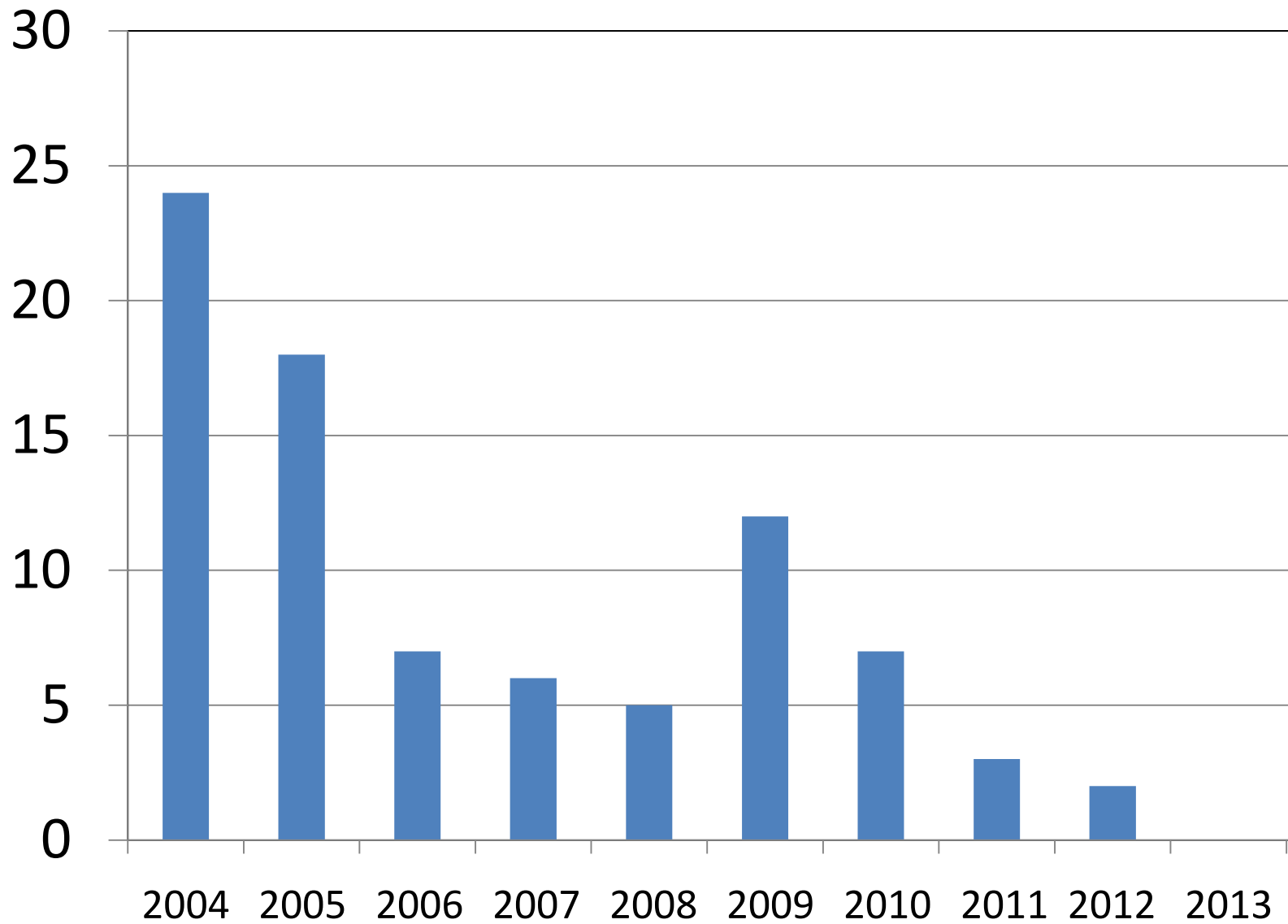
	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013
Sept 21	16	14	2							
22	16	14	4		11	2		2		
23	14	14			12					
24	11	14		2	8					
25	16	15			5				11	
26	16	11								
27	16	14	5	2	2					
28	11	12		5	13					
29	17	11			8					
30	16	14		3	6					
Oct 1	17	14		5	1					
2	16	14	3	6	2	9				
3	14	14	6	7	4	18			16	
4	13	12	2		6	10		4	4	
5	16	10			4	12				3
6	16	14		13	2	11		3		5
7	15	8		11	4	4				
8	16	10							1	
9	14				10		1		6	
10	1				13				4	
11	12			2	16		2			4
12	15			1	16		3			2
13	3	5		4	12		14			
14	15	8	2	8	12		7			3
15	16		8	10	17	2	12			
16	16			5	16	3			3	
17					5	2	10	8		
18				1	5		9	9		
19			8		13	6	9	8	6	
20			8			4			4	4
21							8	1		6
22					7		11	3		
23					7	1		4		

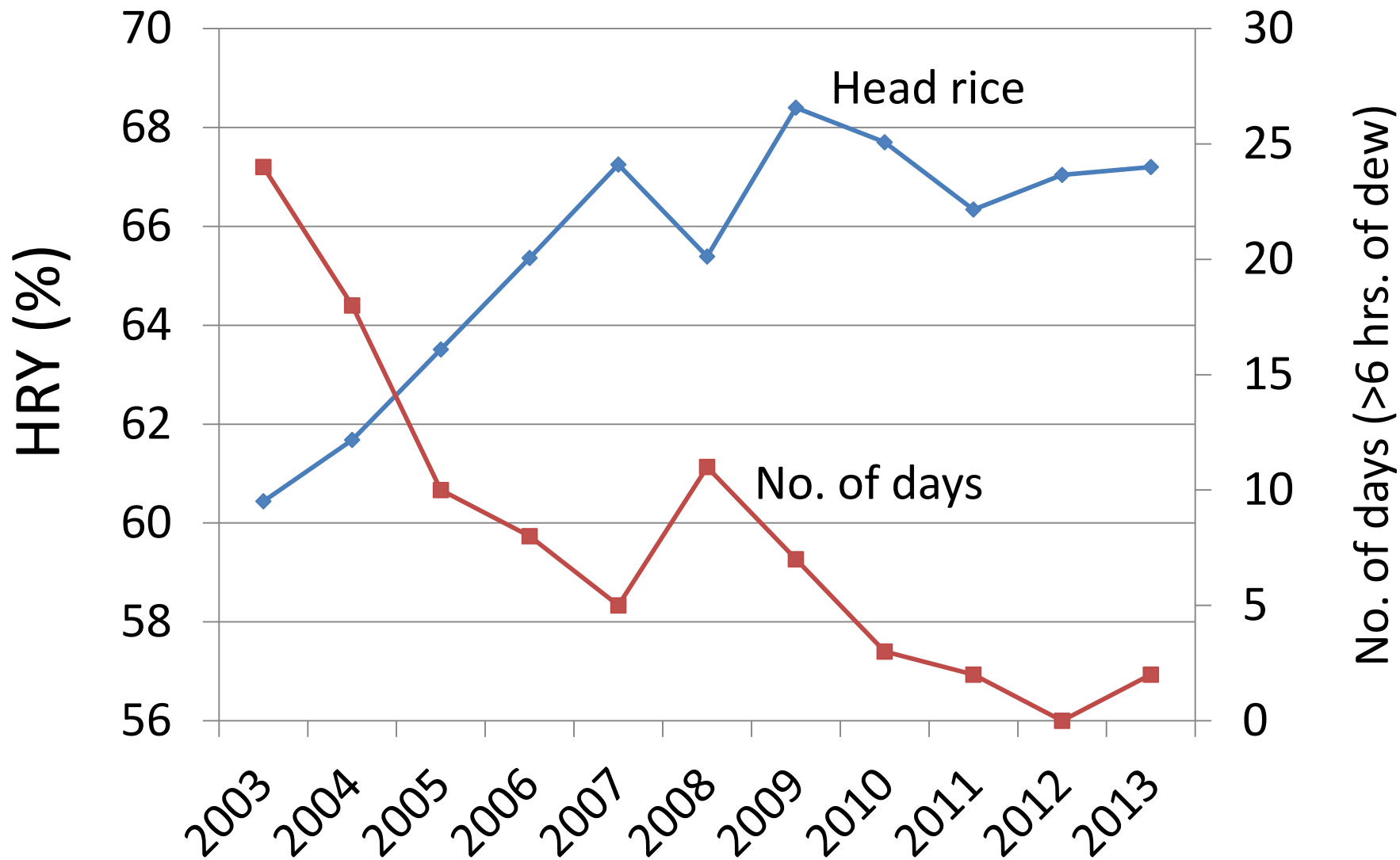
Hours with RH >90%

8 out of past 11 years had few days with prolonged dew.

Total No. days > 6hr dew 24 18 3 4 14 5 7 3 2 0

Days with >6 hrs of dew





Management guidelines for M205 and M206

- Head rice yield. Harvest between 17 and 23% moisture for maximum milling yield.
- Reduced HRY < 17% MC. Loss greater if rice remains in the field with recurring drying-rehydration cycles; i.e. periods of dew > 6 hrs.

A collection of approximately 15 white, translucent, shell-like fragments scattered on a black background. The fragments vary in shape, including teardrop, triangular, and irregular forms. A semi-transparent grey rectangular box is centered over the middle of the fragments, containing the text "Questions & Comments?".

Questions & Comments?