



Six Leading Varieties Response to Chemical Ripeners

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Materials and Methods

Varieties: L0 3-371, HoCP 00-950*, Ho 07-613, L99-233, L 01-283*, L99-226*,
HoCP 96-540*, L 01-299**, Ho 05-961, HoCP 04- 838* (* = included in all 3 years)
(** only 2014 & 2015)
*** (HoCP 09-804 & Ho 09-840 yet to be tested in our trial)

2nd Ratoon Crop

Tested in 2012, 2014, 2015 (2013 was the furlough year and data was incomplete)

Treatments: Glyphosate @ 5.3 oz/a, Moddus @ 11 oz/A, and a Control

Applied at 10 GPA between the 8/21 – 9/01

Location was at the USDA Ardoyne Farm

All treatments were hand applied and harvested. Samples were stripped of all extraneous leaf material.



		Buffer													
		L01-283			HoCP96-540			L99-226			L03-371				
10	L01-283	407M	407C	407T	408T	408C	408M	409M	409C	409T	410T	410C	410M	Ho07-613	
9		HoCP04-838			HoCP00-950			Ho05-961			L99-233				
		403M	403C	403T	404T	404C	404M	405M	405C	405T	406T	406C	406M		
8	HoCP04-838	Ho07-613			L01-283			L01-299			Ho07-613			HoCP96-540	
		309M	309C	309T	310T	310C	310M	401M	401C	401T	402T	402C	402M		
7	F	L99-226			HoCP96-540			L01-299			HoCP04-838				
		305M	305C	305T	306T	306C	306M	307M	307C	307T	308T	308C	308M		
6	A	HoCP00-950			L03-371			L99-233			Ho05-961				
	L	301M	301C	301T	302T	302C	302M	303M	303C	303T	304T	304C	304M	L03-371	
5	O	L01-299			L01-283			HoCP00-950			L03-371				
	W	207M	207C	207T	208T	208C	208M	209M	209C	209T	210T	210C	210M		
4	R	L99-233			HoCP96-540			HoCP04-838			Ho07-613				
	O	203M	203C	203T	204T	204C	204M	205M	205C	205T	206T	206C	206M	L99-226	
3		L99-226			Ho05-961			Ho05-961			HoCP04-838				
	W	201M	201C	201T	202T	202C	202M	109M	109C	109T	110T	110C	110M		
2		L01-283			L99-226			HoCP96-540			L01-299			Ho05-961	
	L99-233	105M	105C	105T	106T	106C	106M	107M	107C	107T	108T	108C	108M		
1		L03-371			HoCP00-950			Ho07-613			L99-233				
		101M	101C	101T	102T	102C	102M	103M	103C	103T	104T	104C	104M		
		384	845	988	540	128	226	233	950	283	299	371	838	961	613
1		2	3	4	5	6	7	8	9	10	11	12	13	14	15

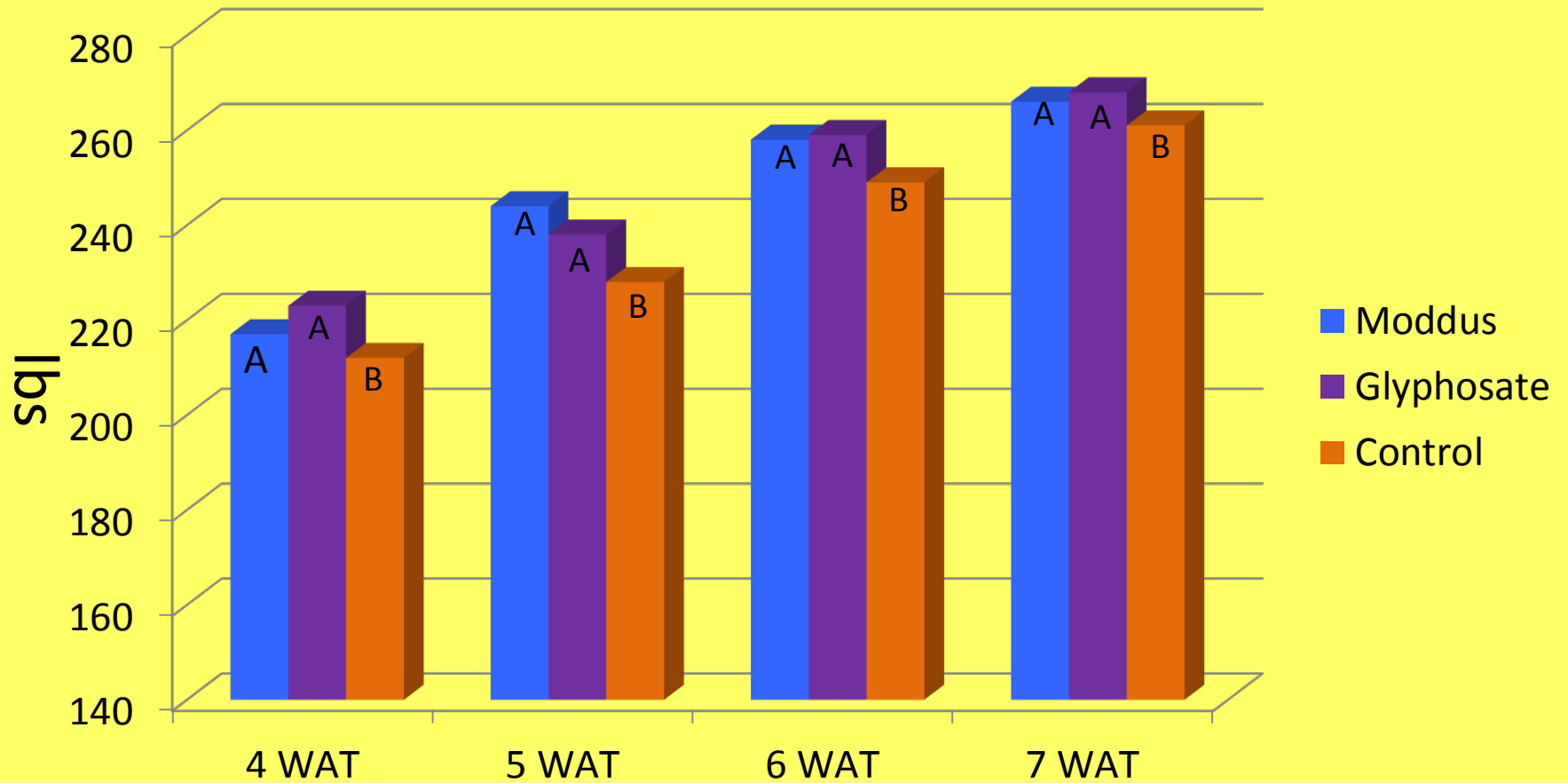
Stalk Weight

While we would expect a difference in stalk weight between the treatments our data showed that there was no significant difference between treatments.



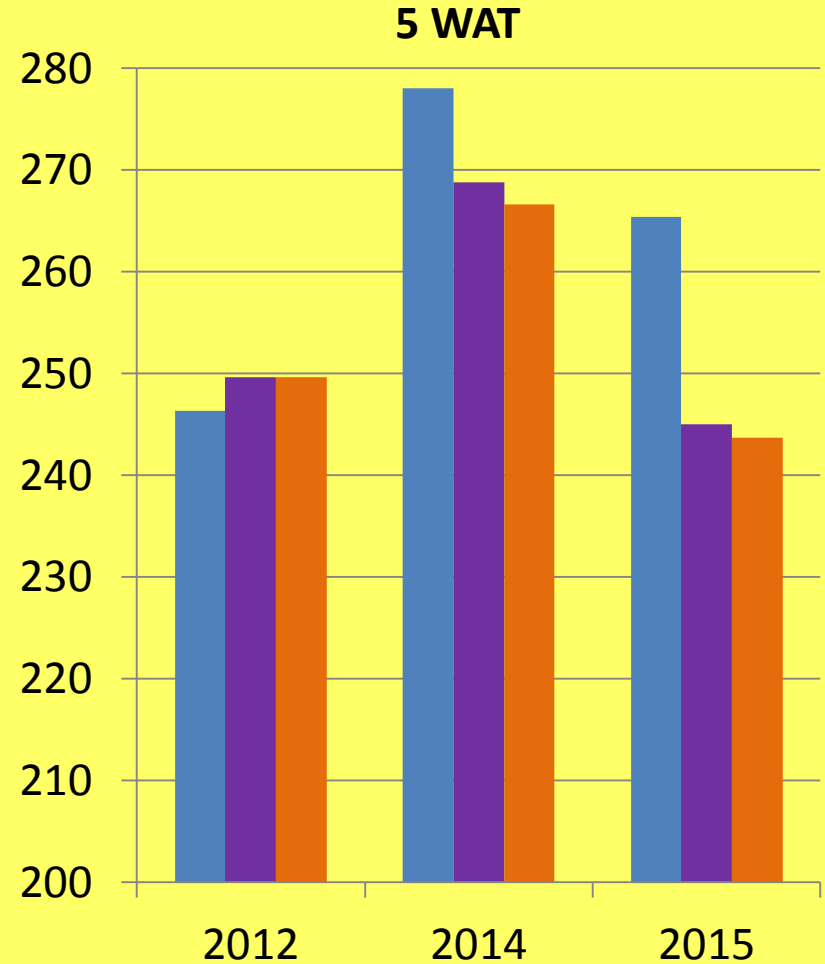
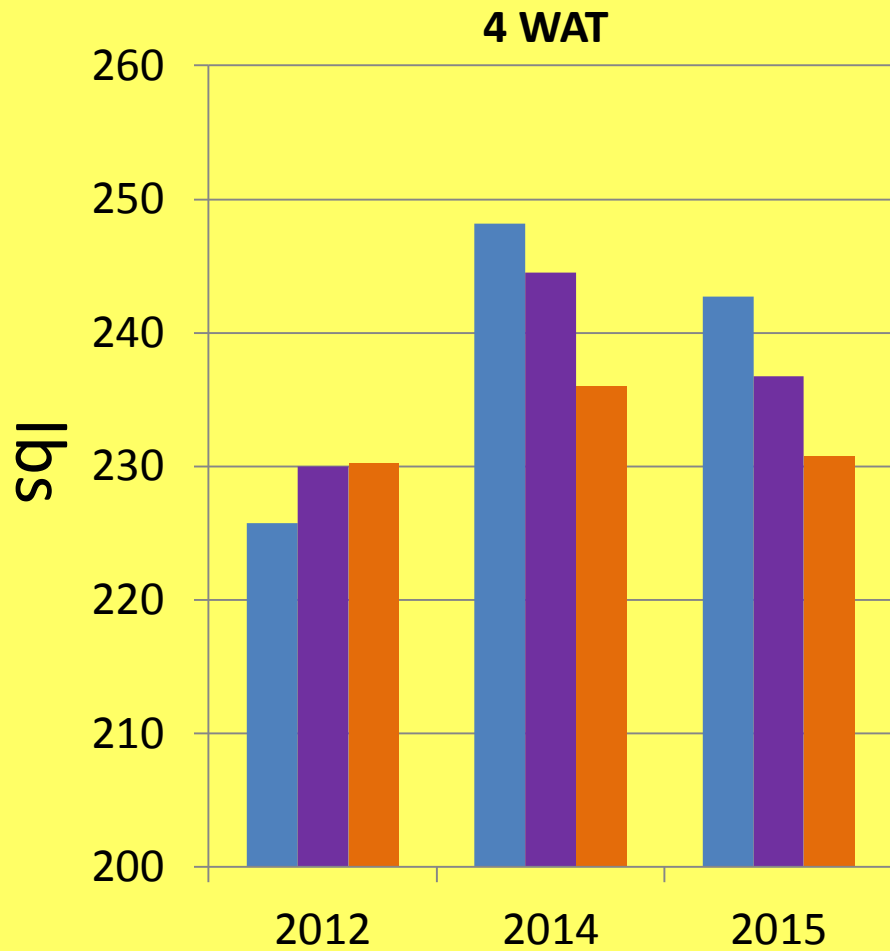
Treatments Over Years

TRS



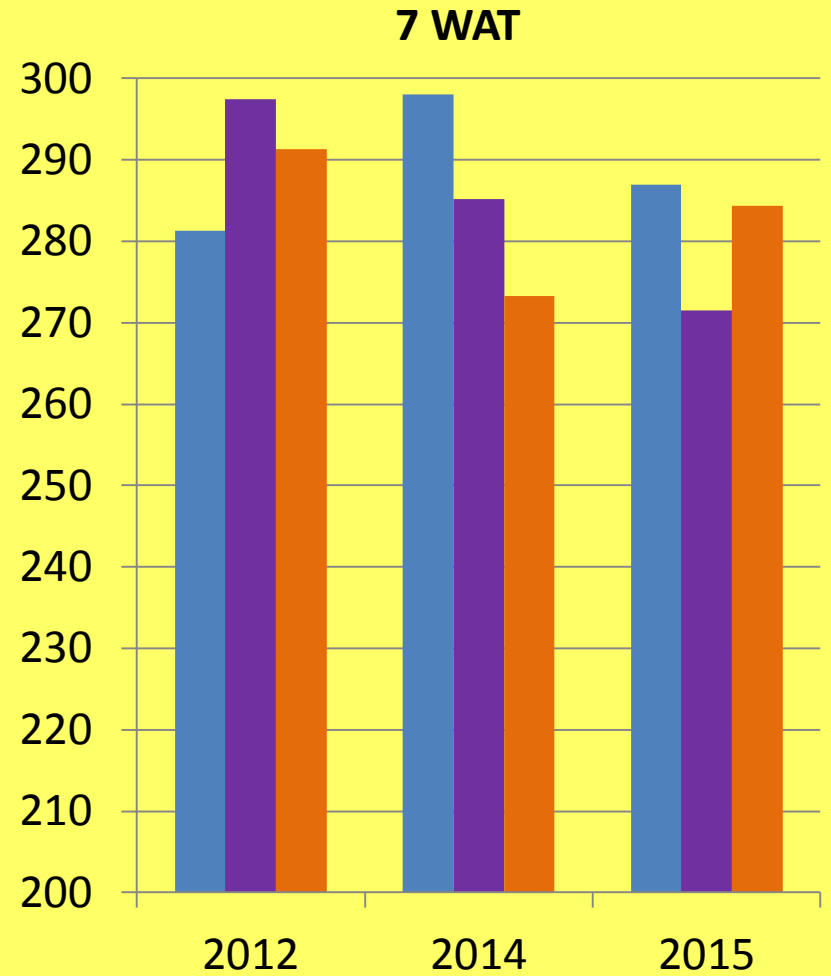
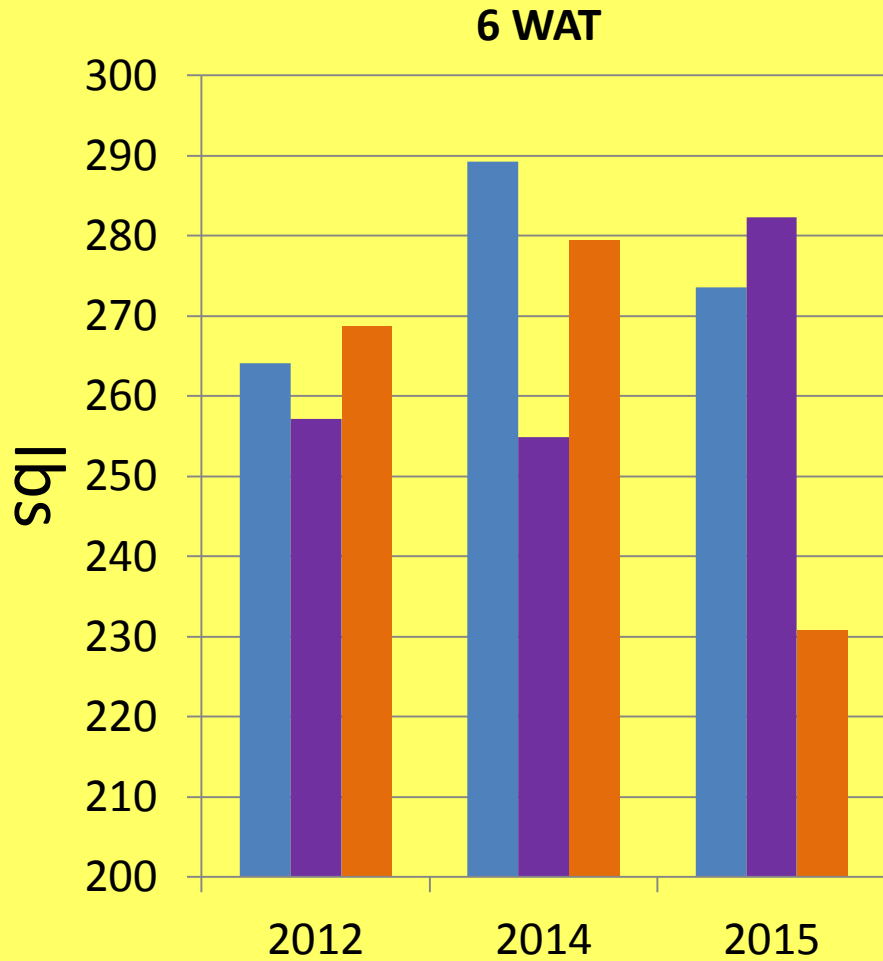
Varietal Responses

HoCP 00-950 TRS



■ Moddus ■ Glyphosate ■ Control

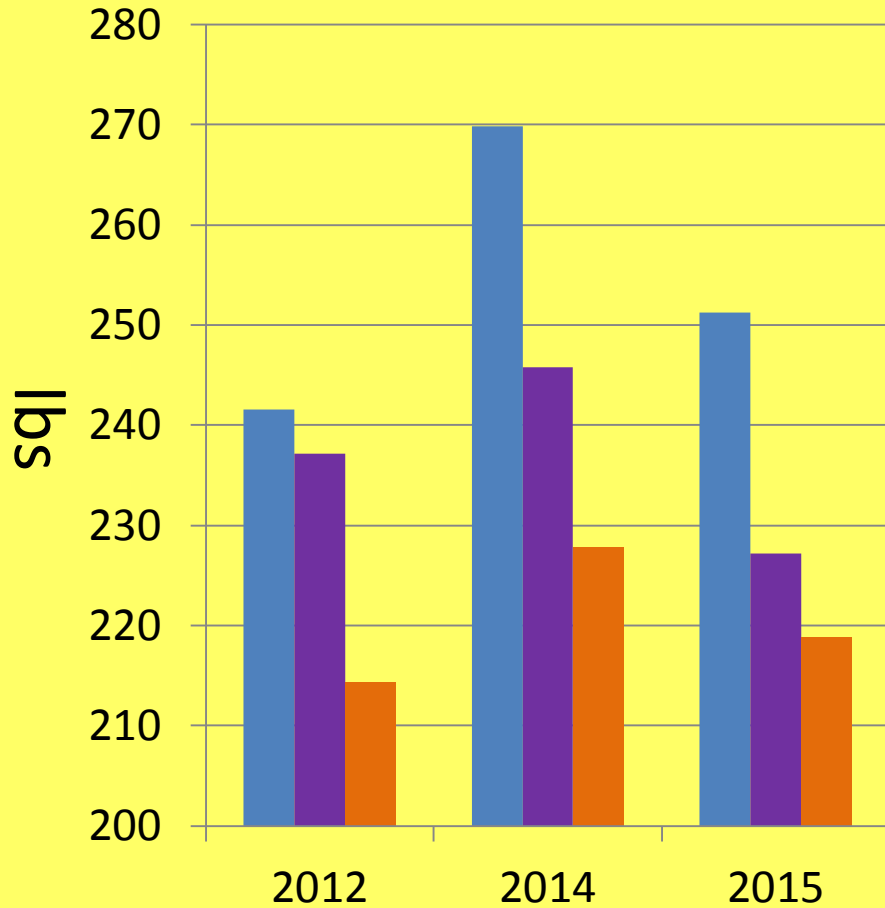
HoCP 00-950 TRS



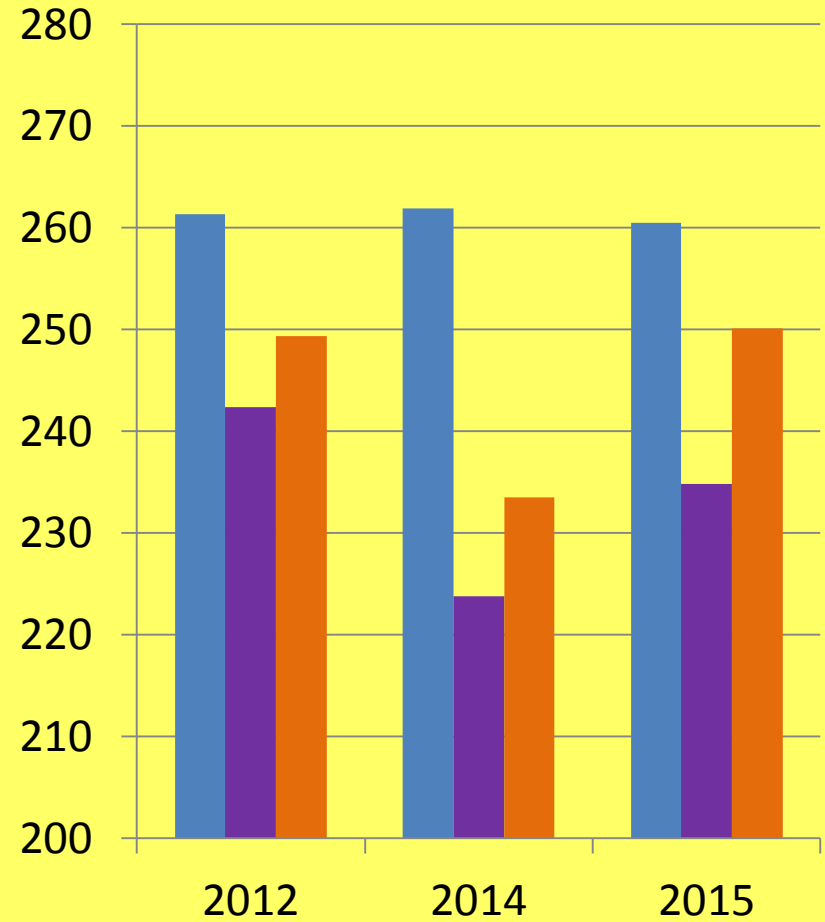
■ Moddus ■ Glyphosate ■ Control

L 01-283 TRS

4 WAT



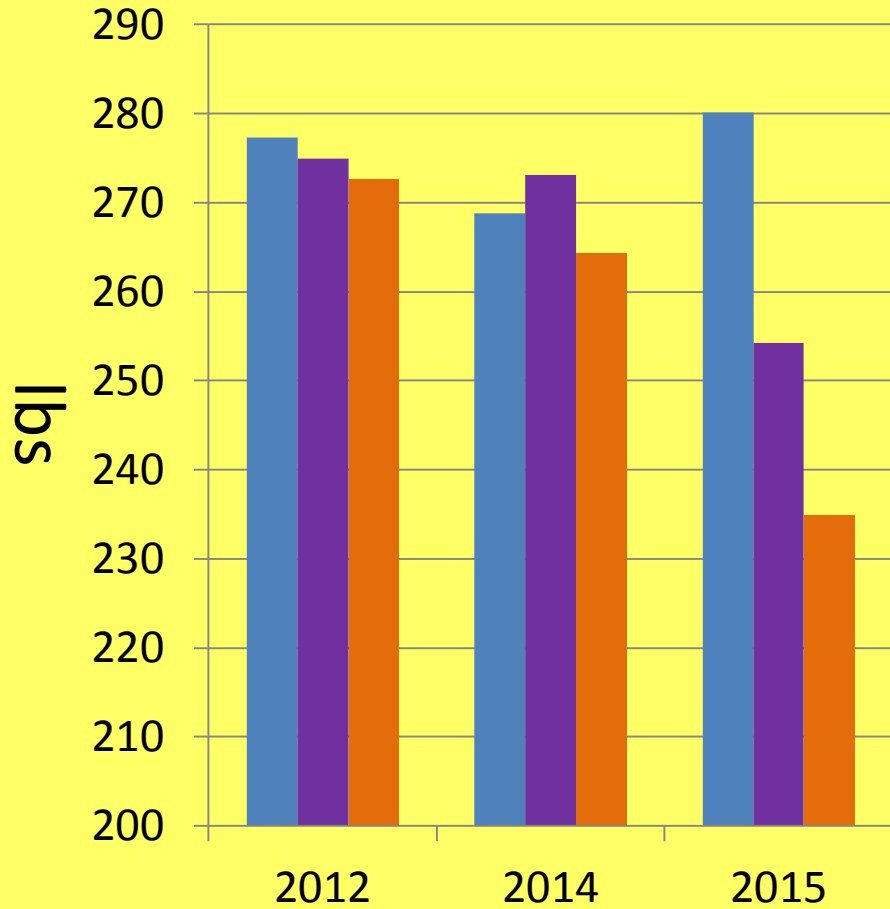
5 WAT



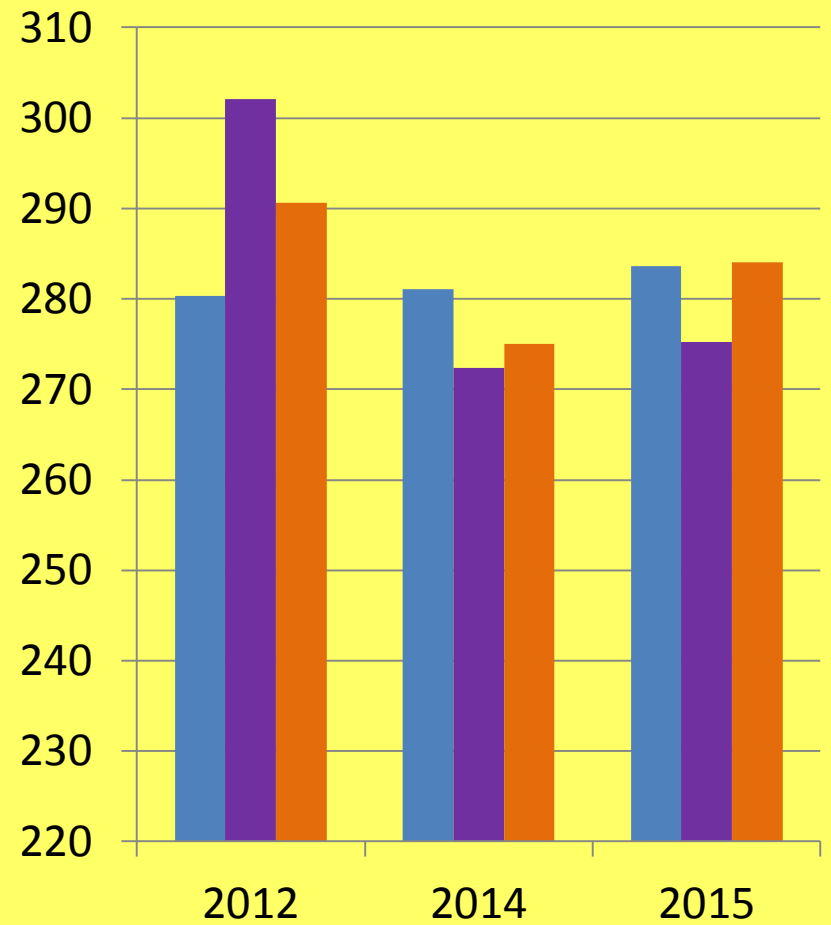
■ Moddus ■ Glyphosate ■ Control

L 01-283 TRS

6 WAT



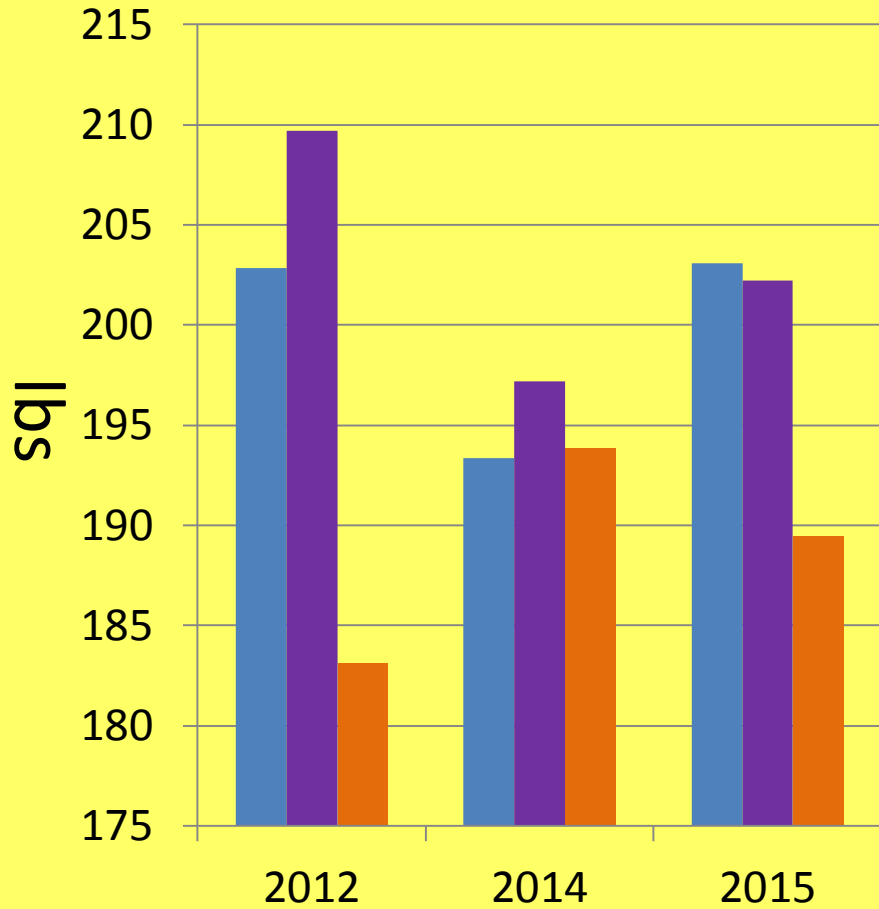
7 WAT



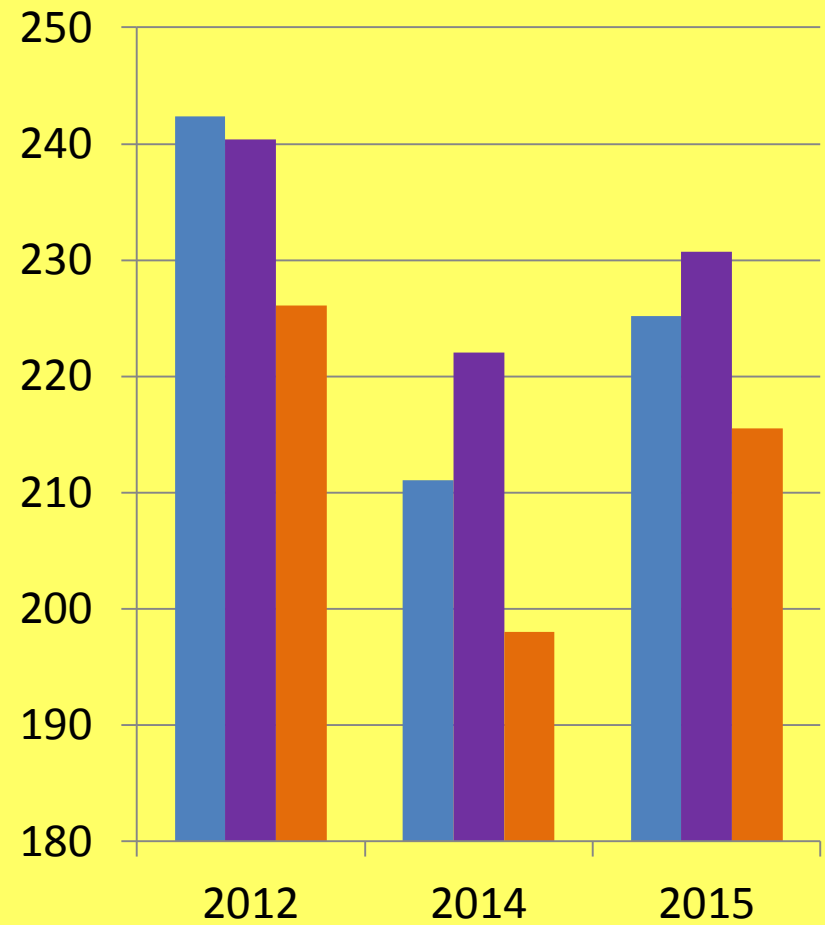
■ Moddus ■ Glyphosate ■ Control

HoCP 96-540 TRS

4 WAT



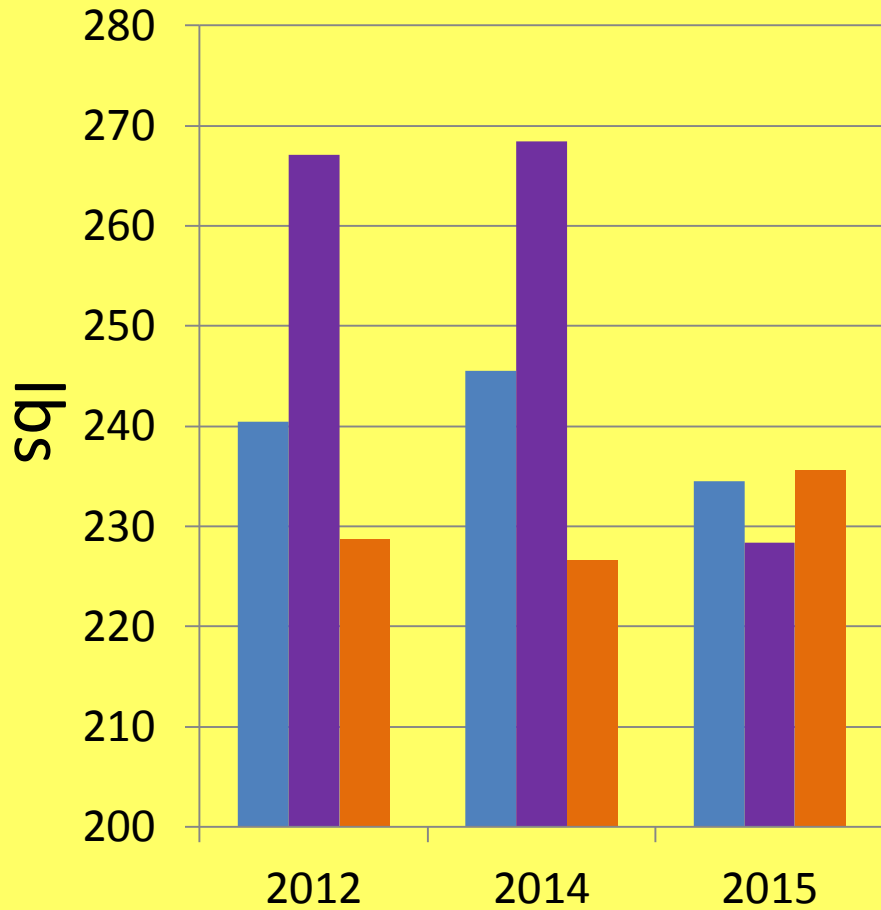
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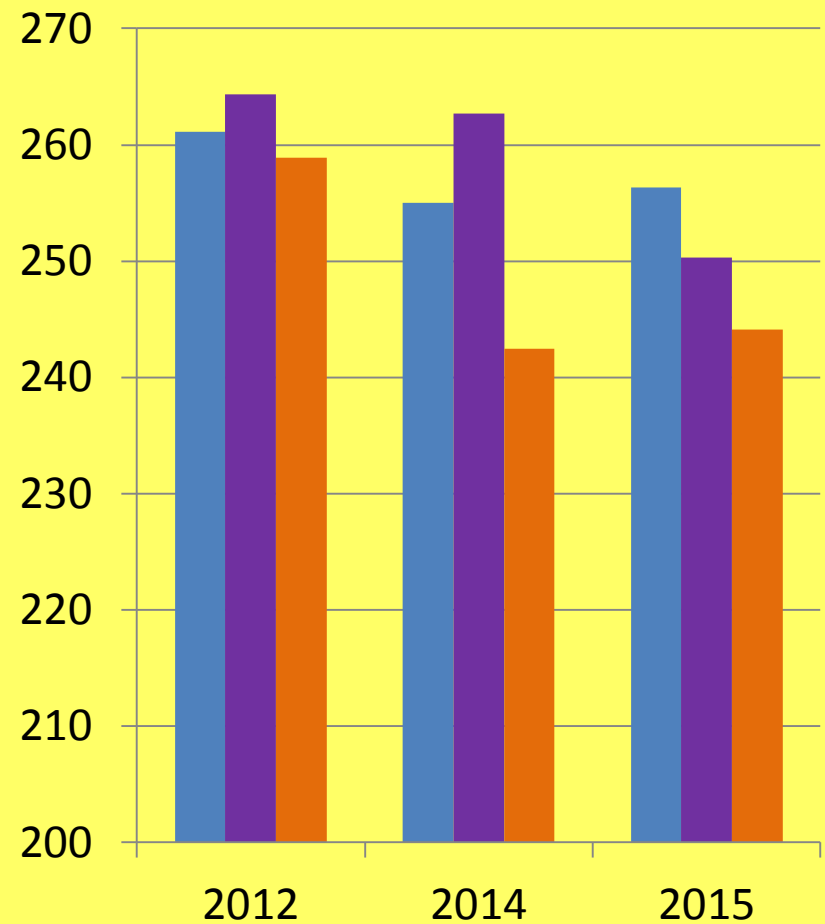
■ Moddus ■ Glyphosate ■ Control

HoCP 96-540 TRS

6 WAT



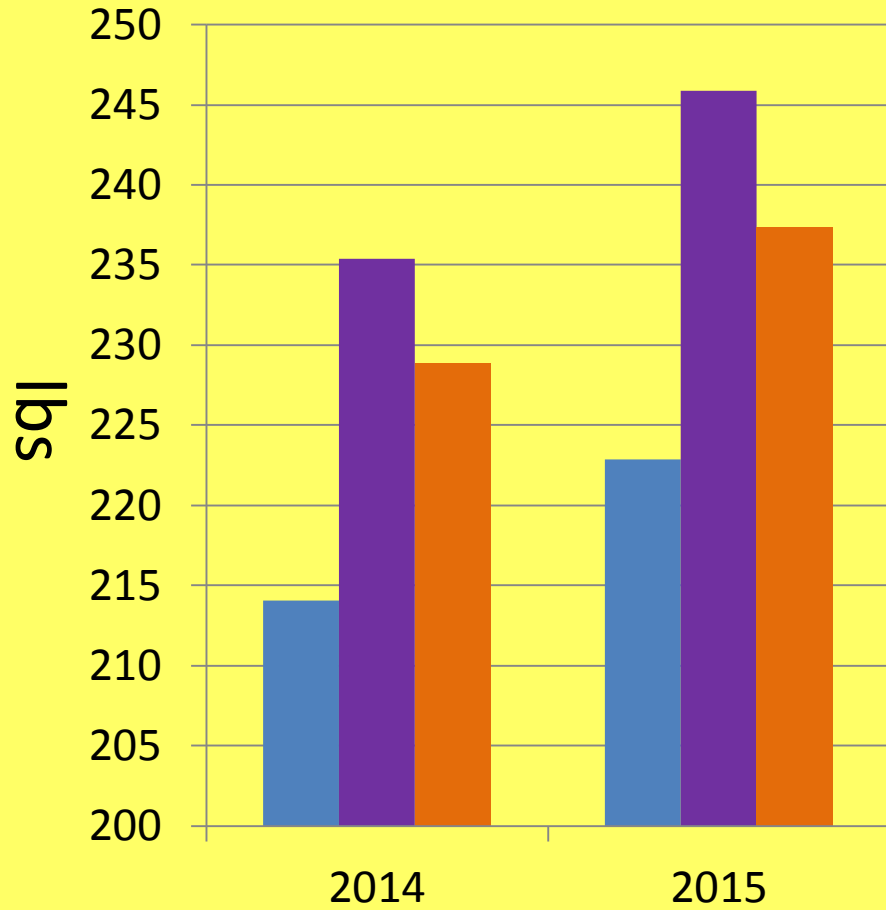
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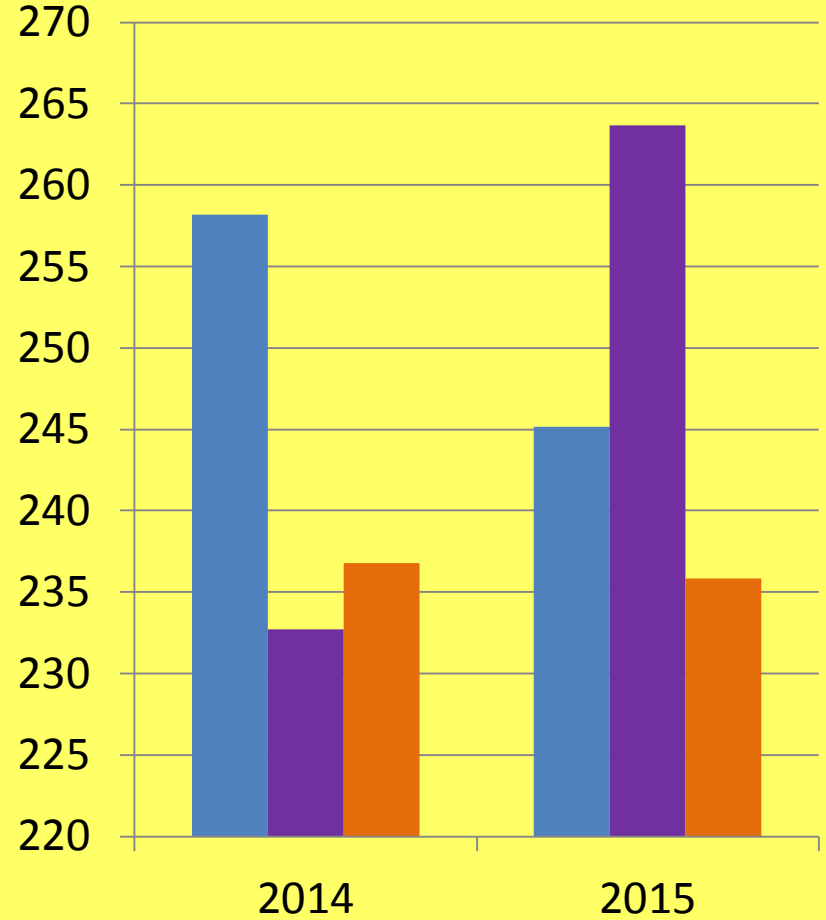
■ Moddus ■ Glyphosate ■ Control

L 01-299 TRS

4 WAT



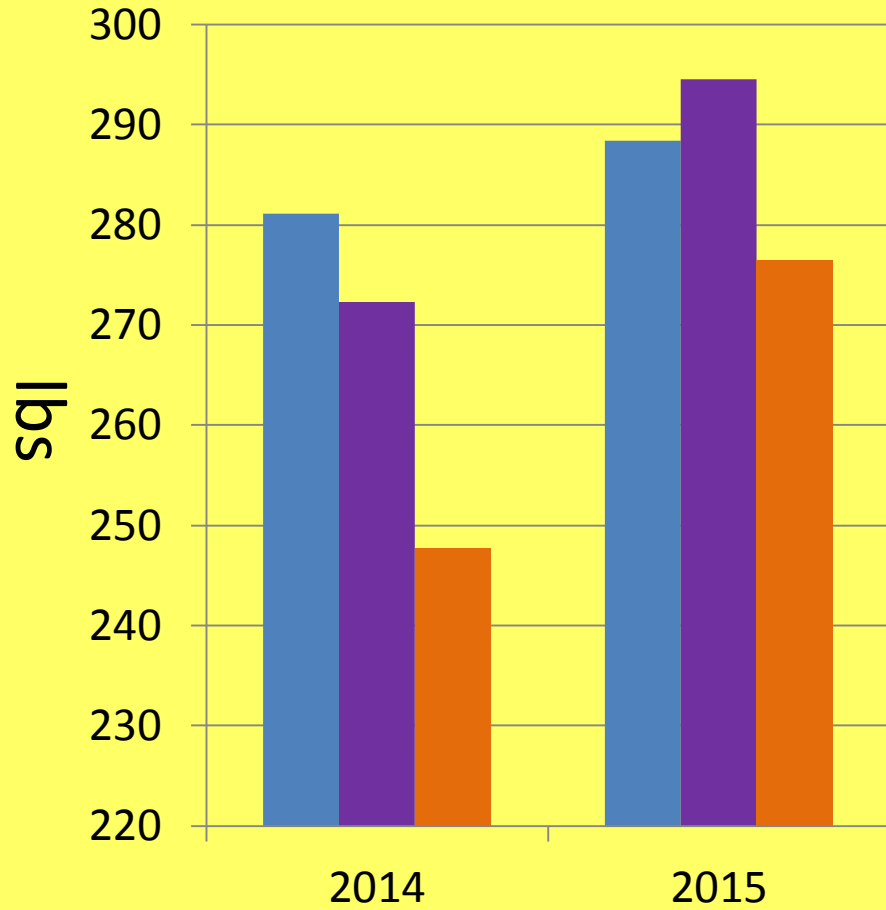
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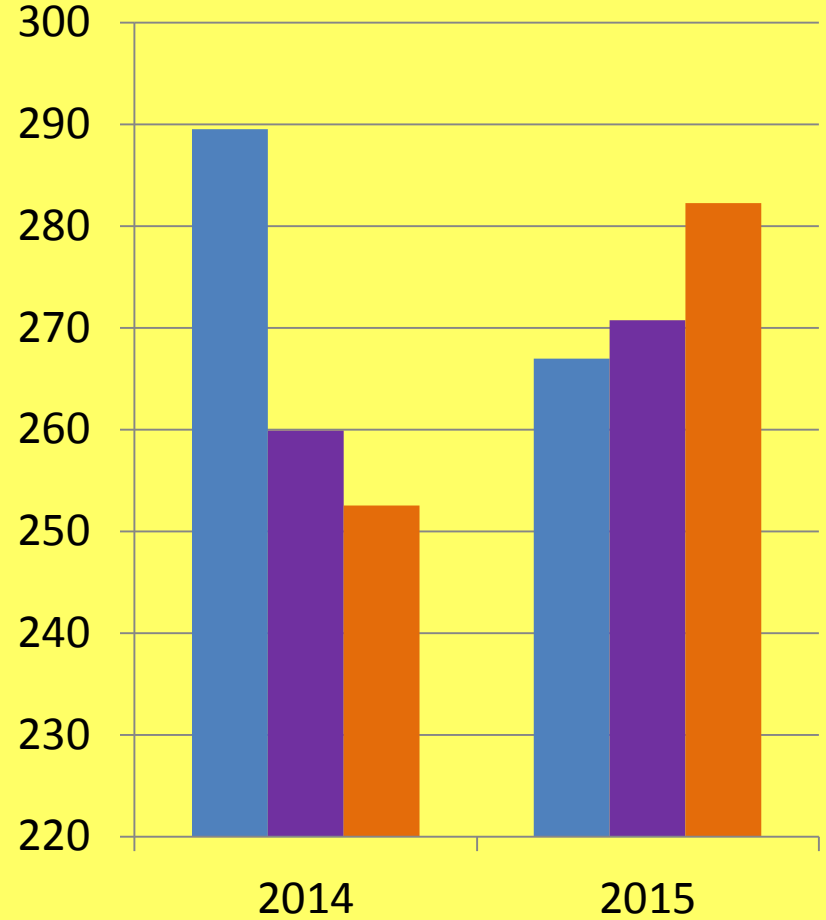
■ Moddus ■ Glyphosate ■ Control

L 01-299 TRS

6 WAT



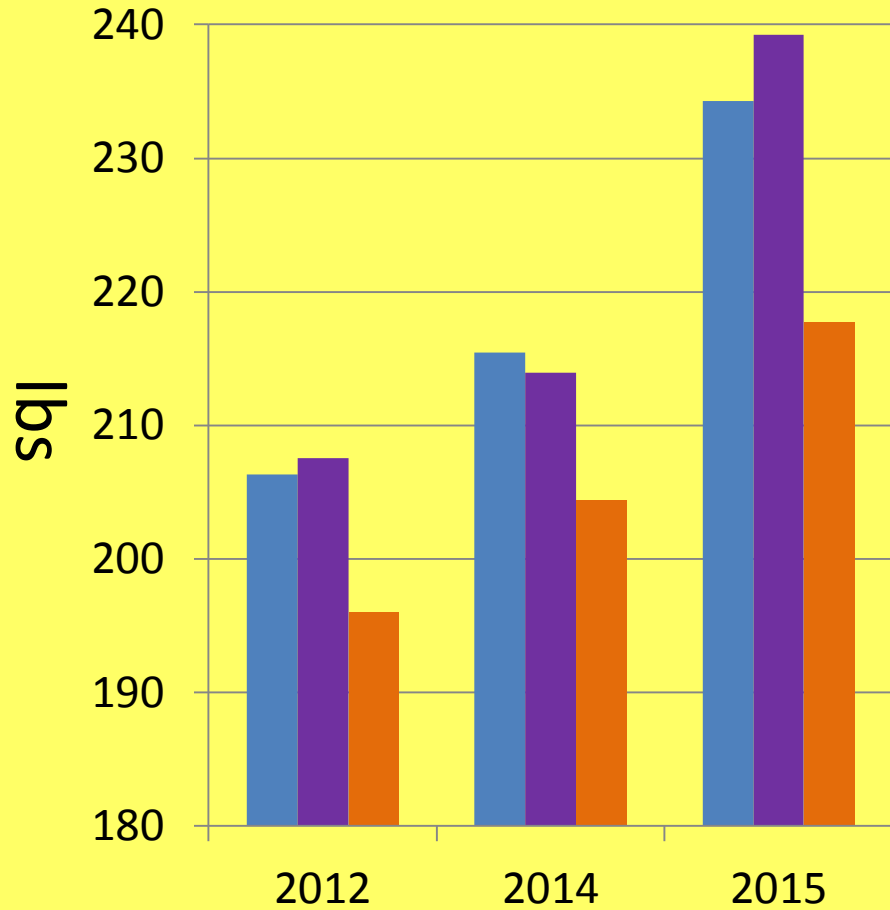
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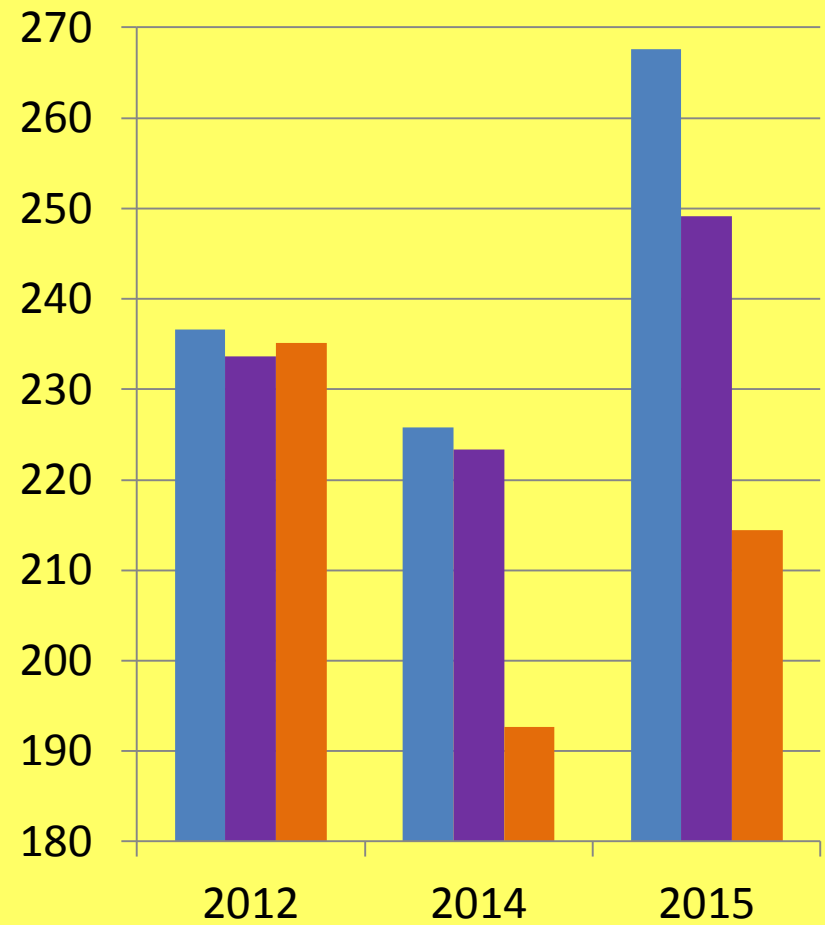
■ Moddus ■ Glyphosate ■ Control

L 99-226 TRS

4 WAT



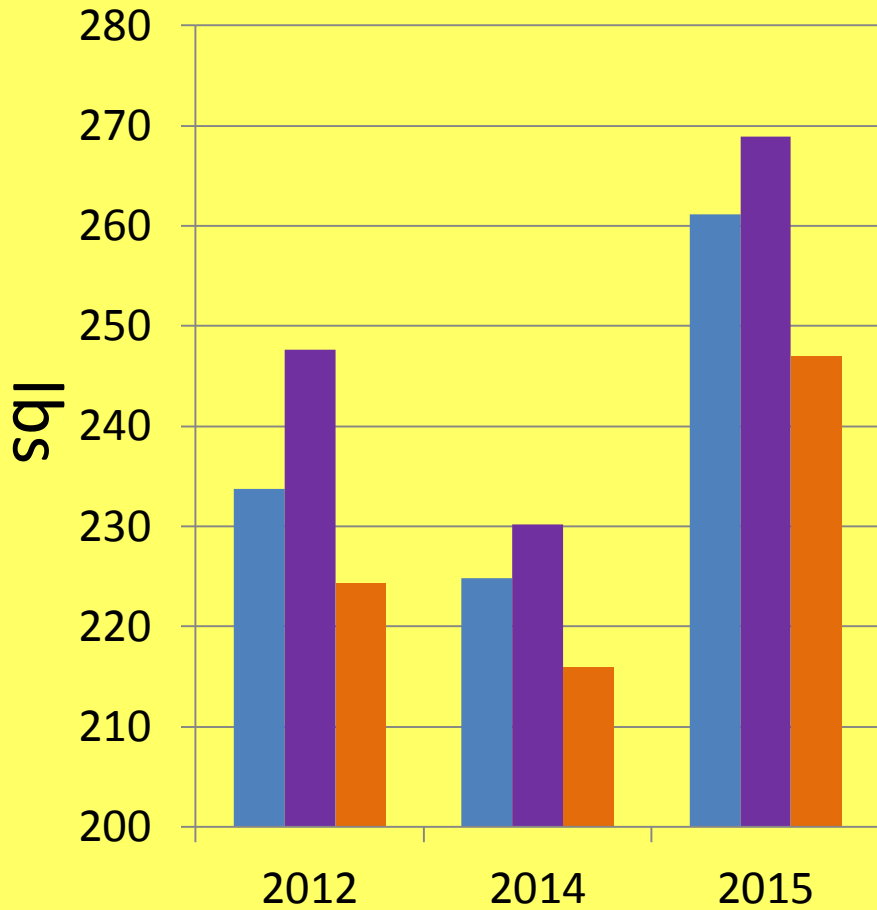
5 WAT



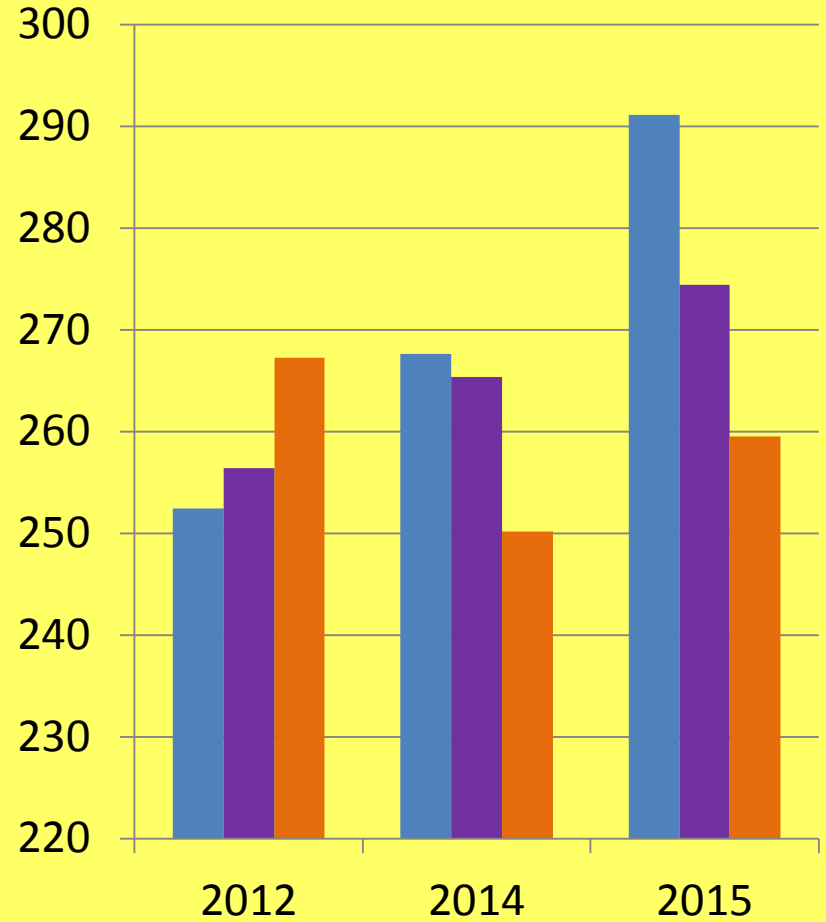
■ Moddus ■ Glyphosate ■ Control

L 99-226 TRS

6 WAT



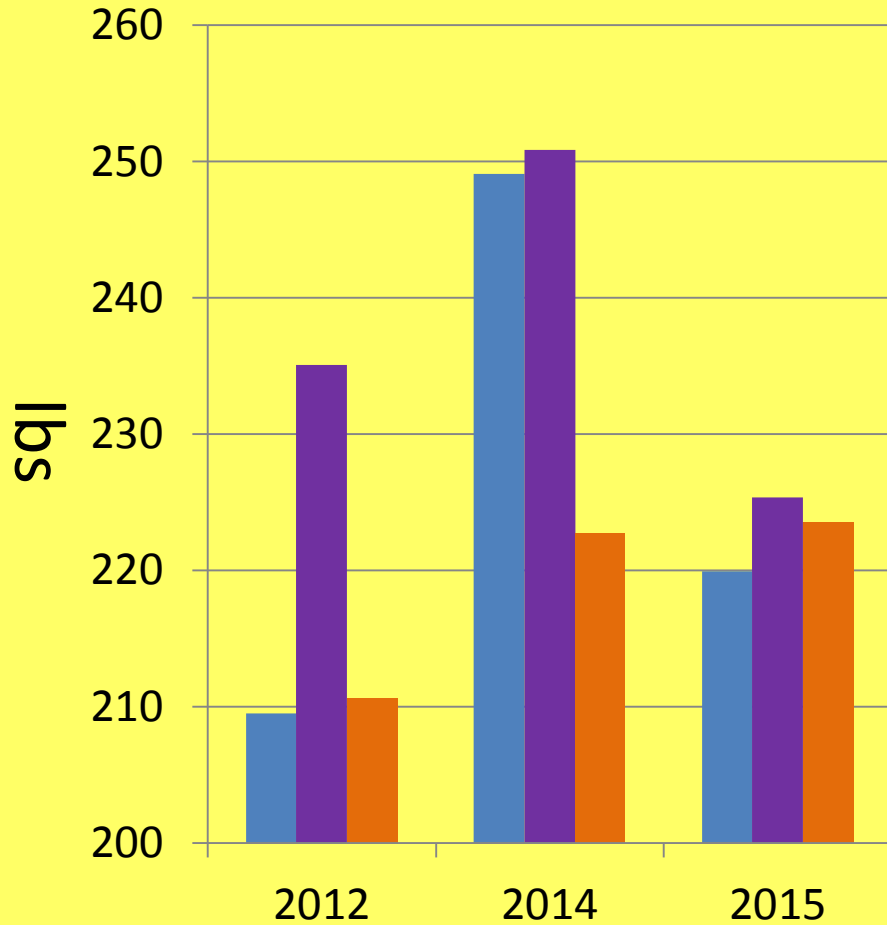
7 WAT



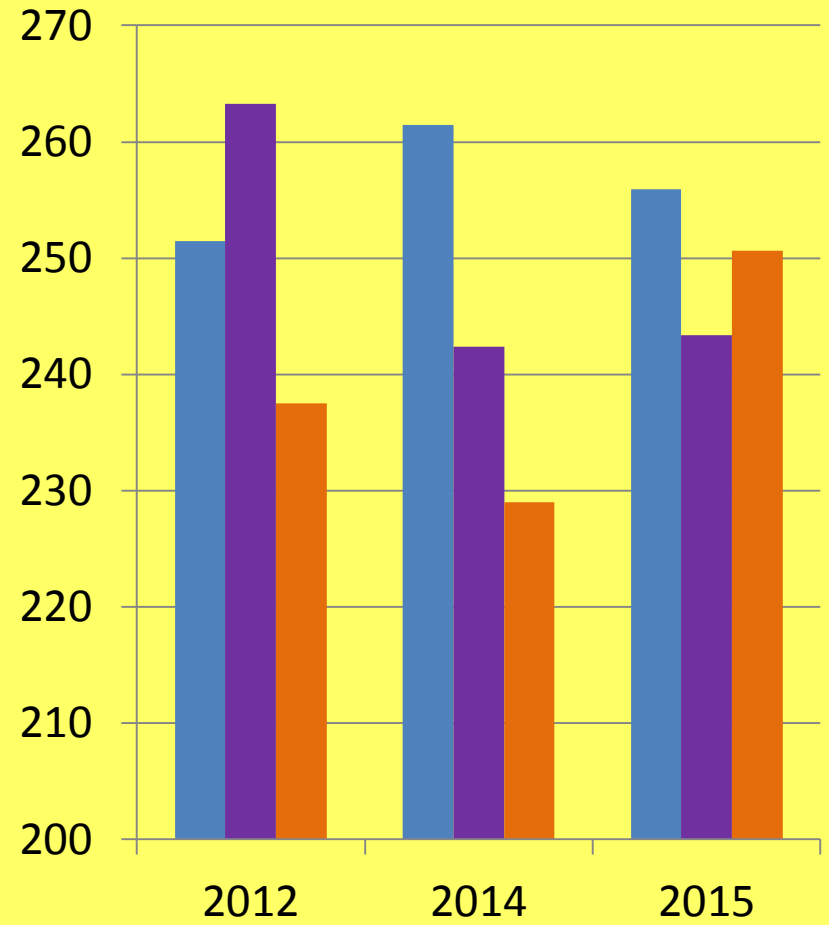
■ Moddus ■ Glyphosate ■ Control

HoCP 04-838 TRS

4 WAT

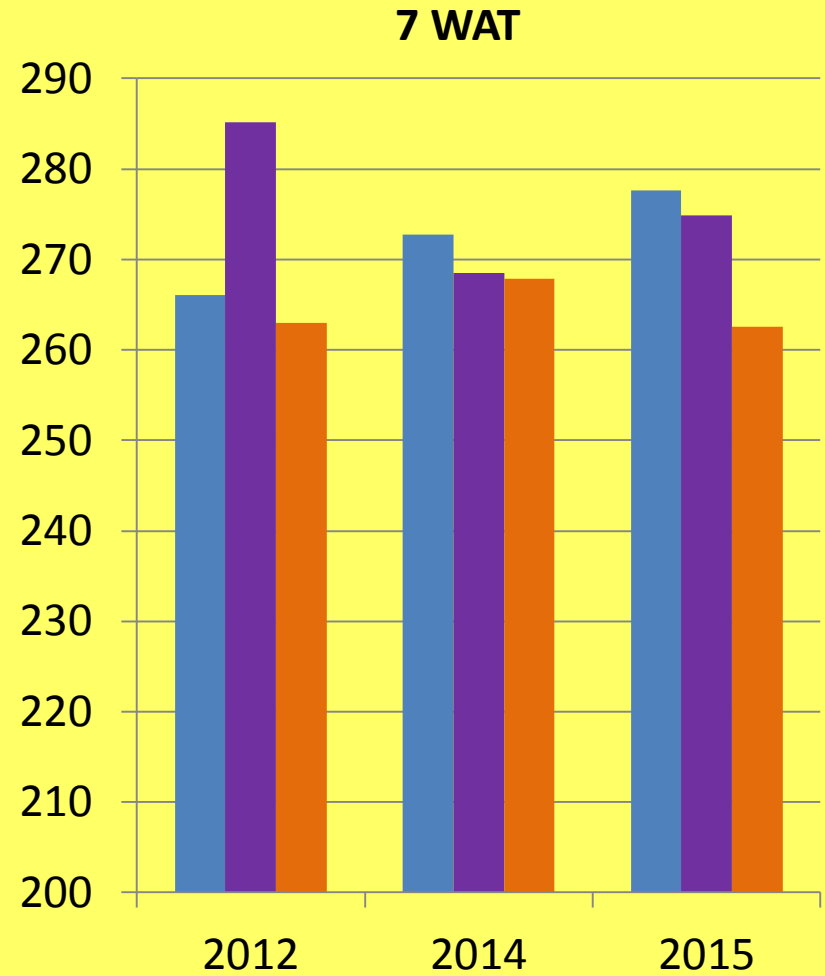
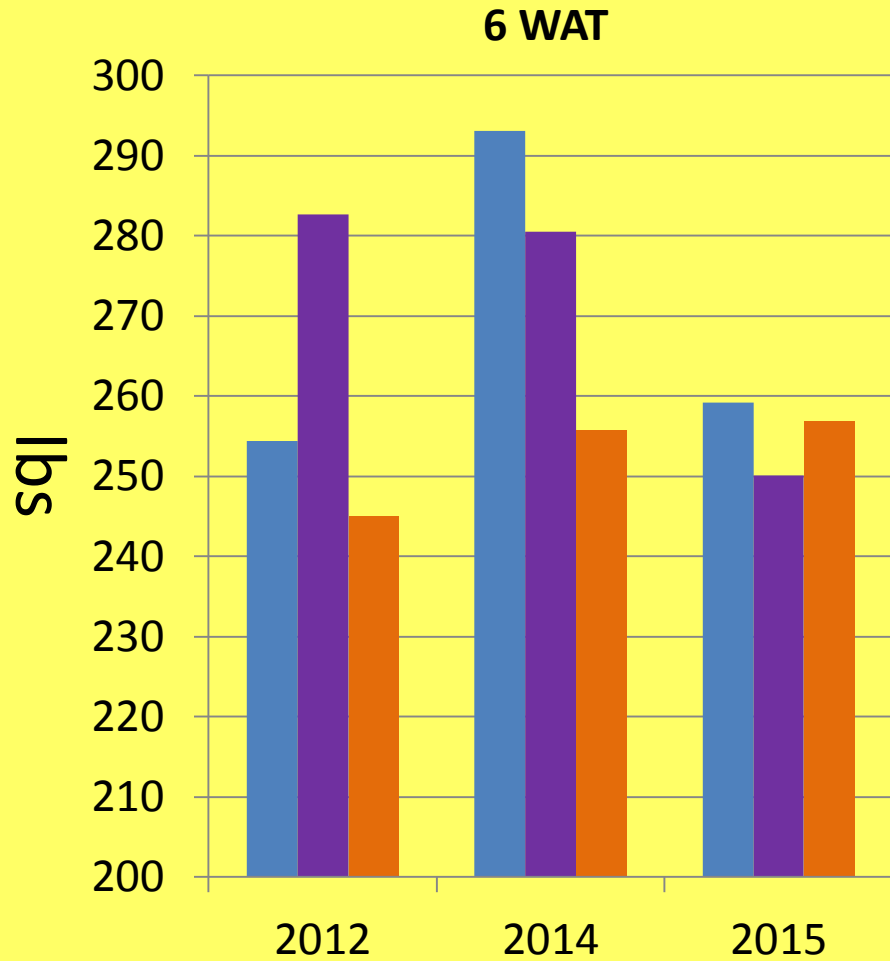


5 WAT



■ Moddus ■ Glyphosate ■ Control

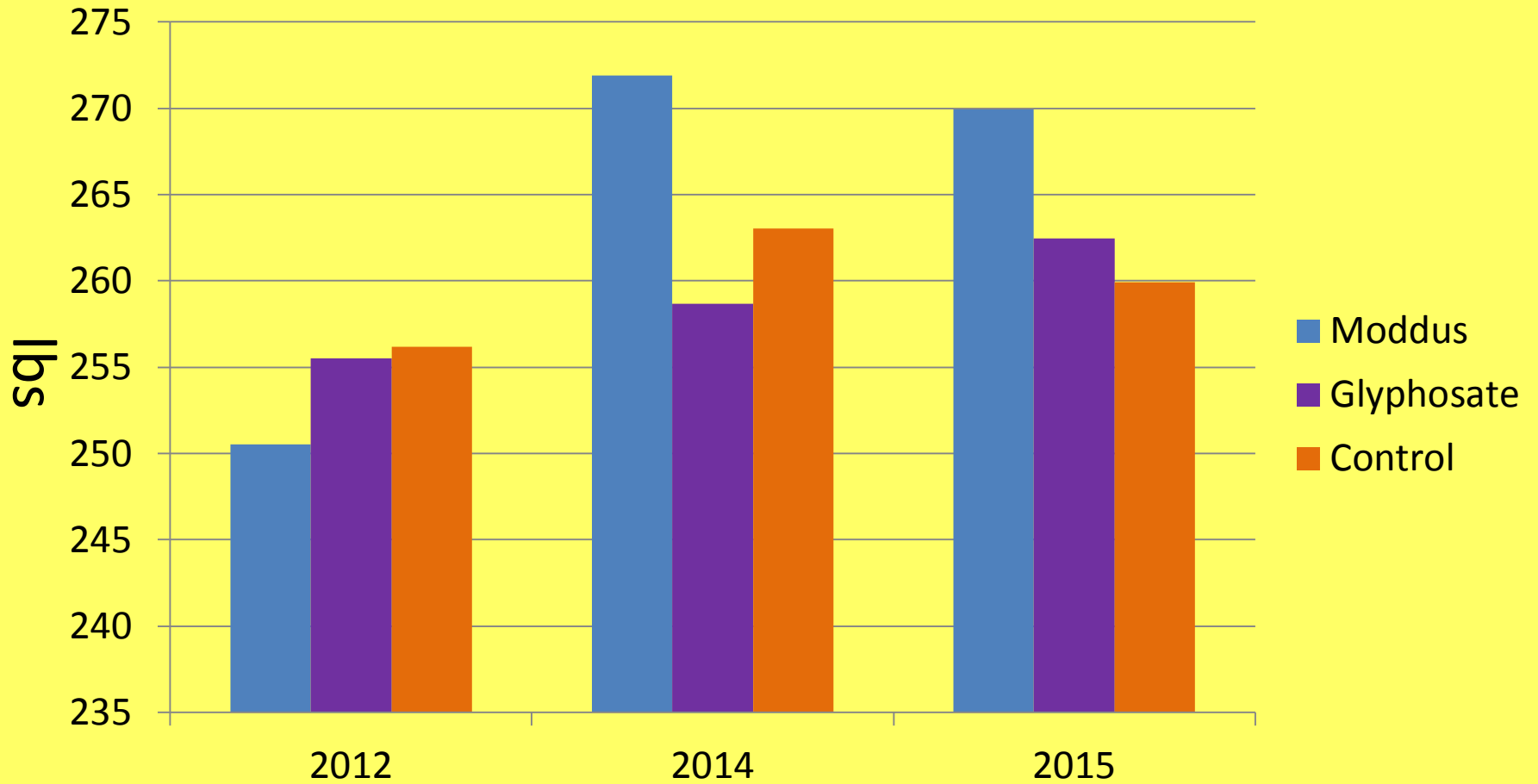
HoCP 04-838 TRS



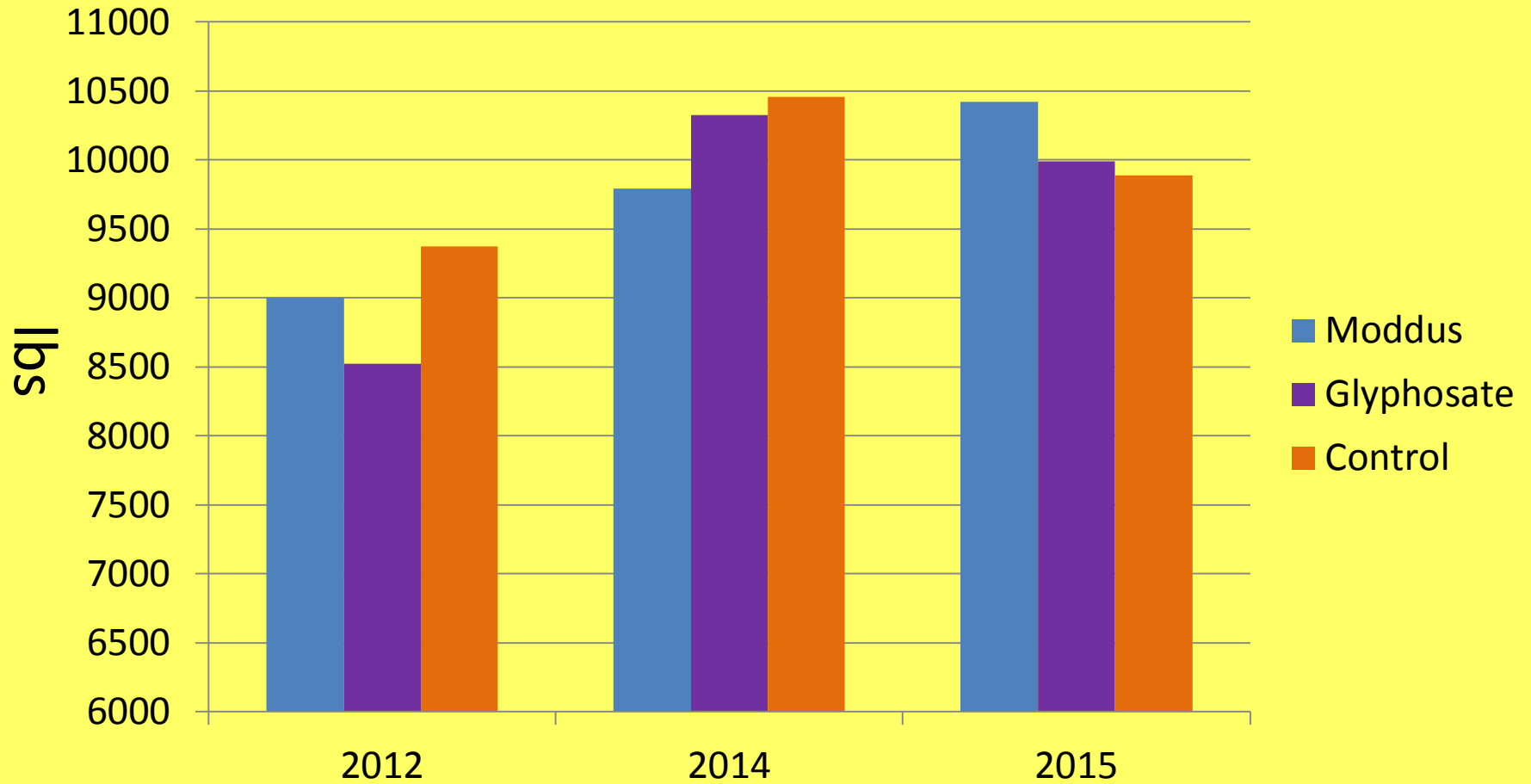
■ Moddus ■ Glyphosate ■ Control

Average Over Sample Timing

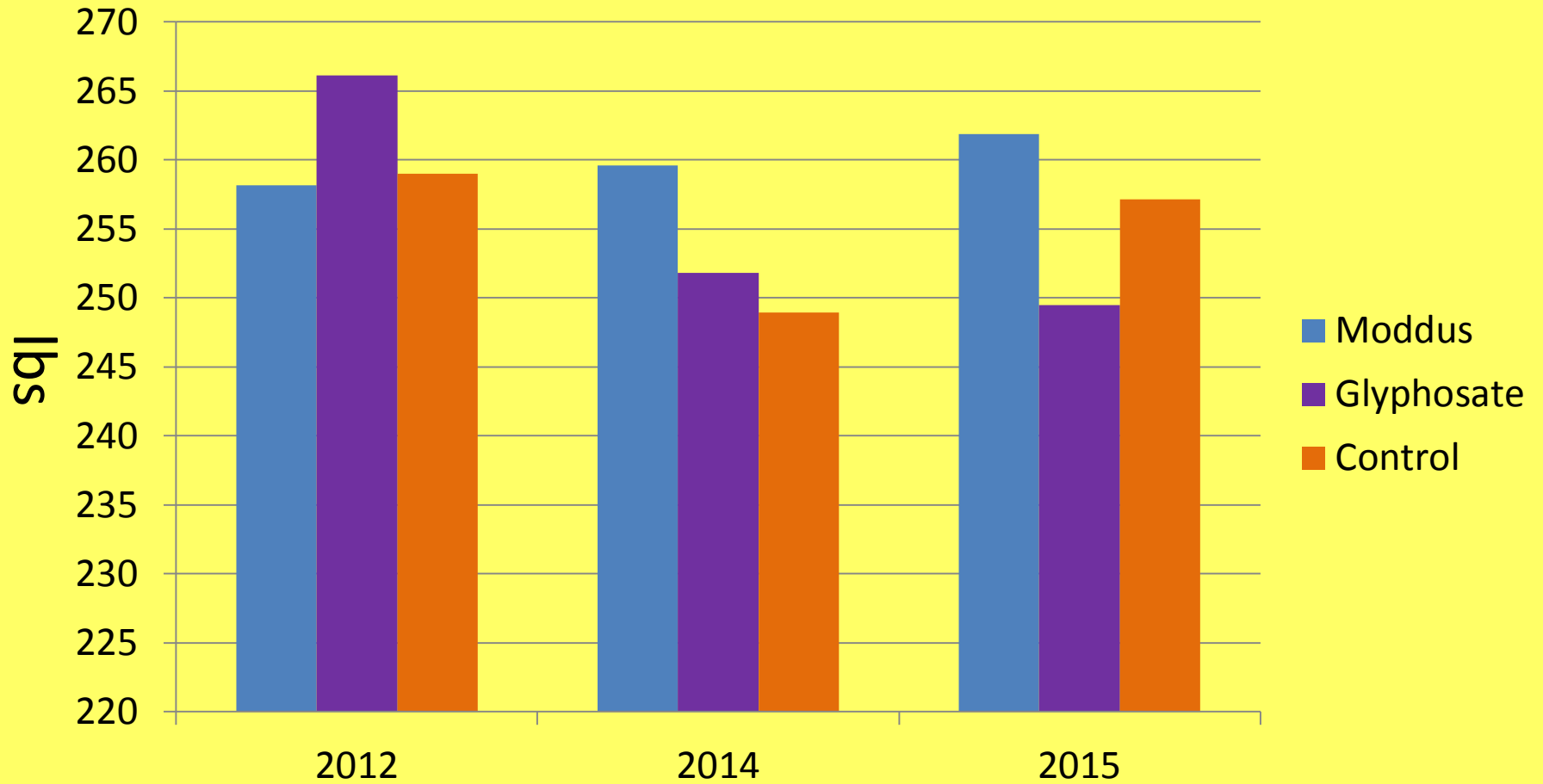
HoCP 00-950 TRS



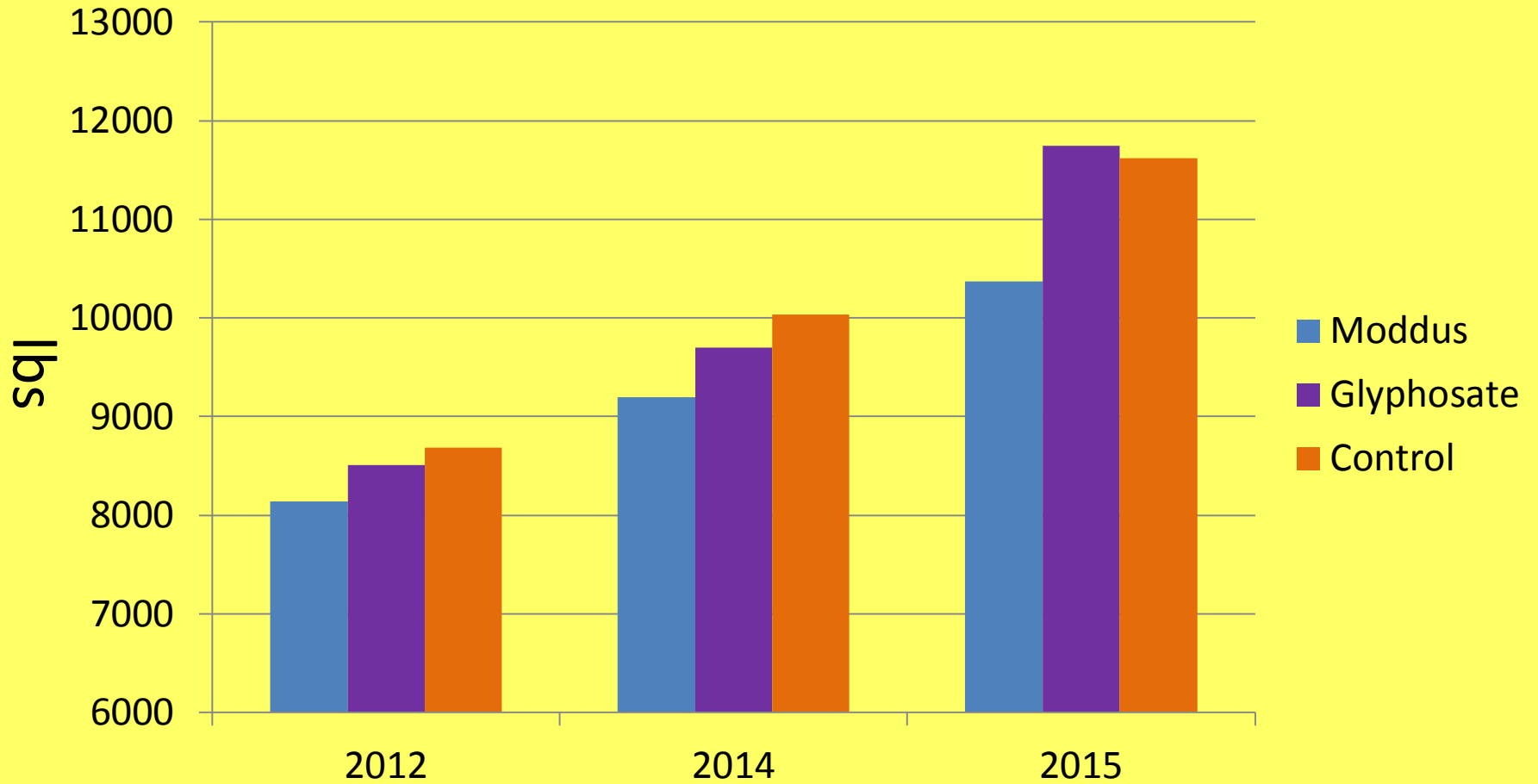
HoCP 00-950 Sugar/Acre



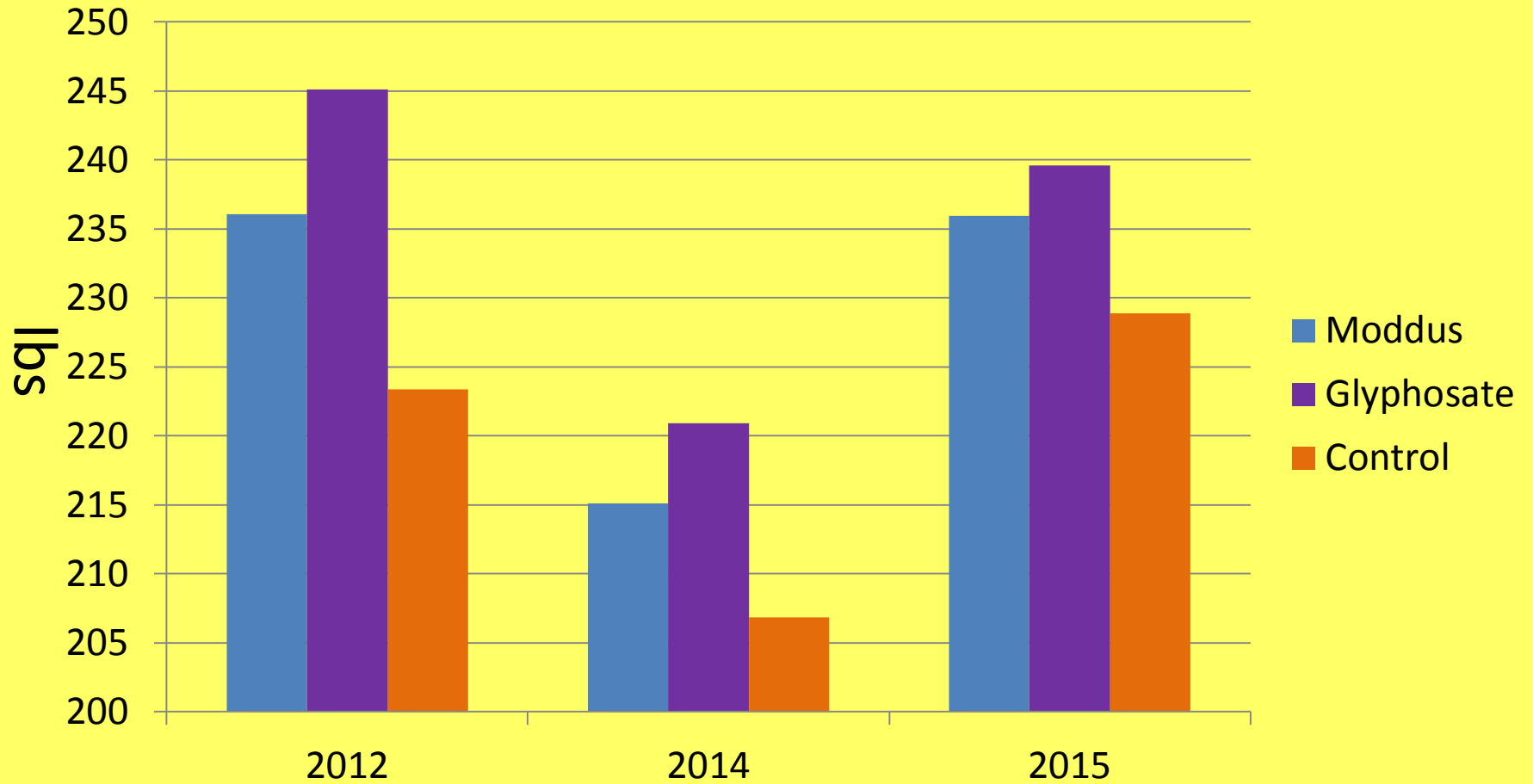
L 01-283 TRS



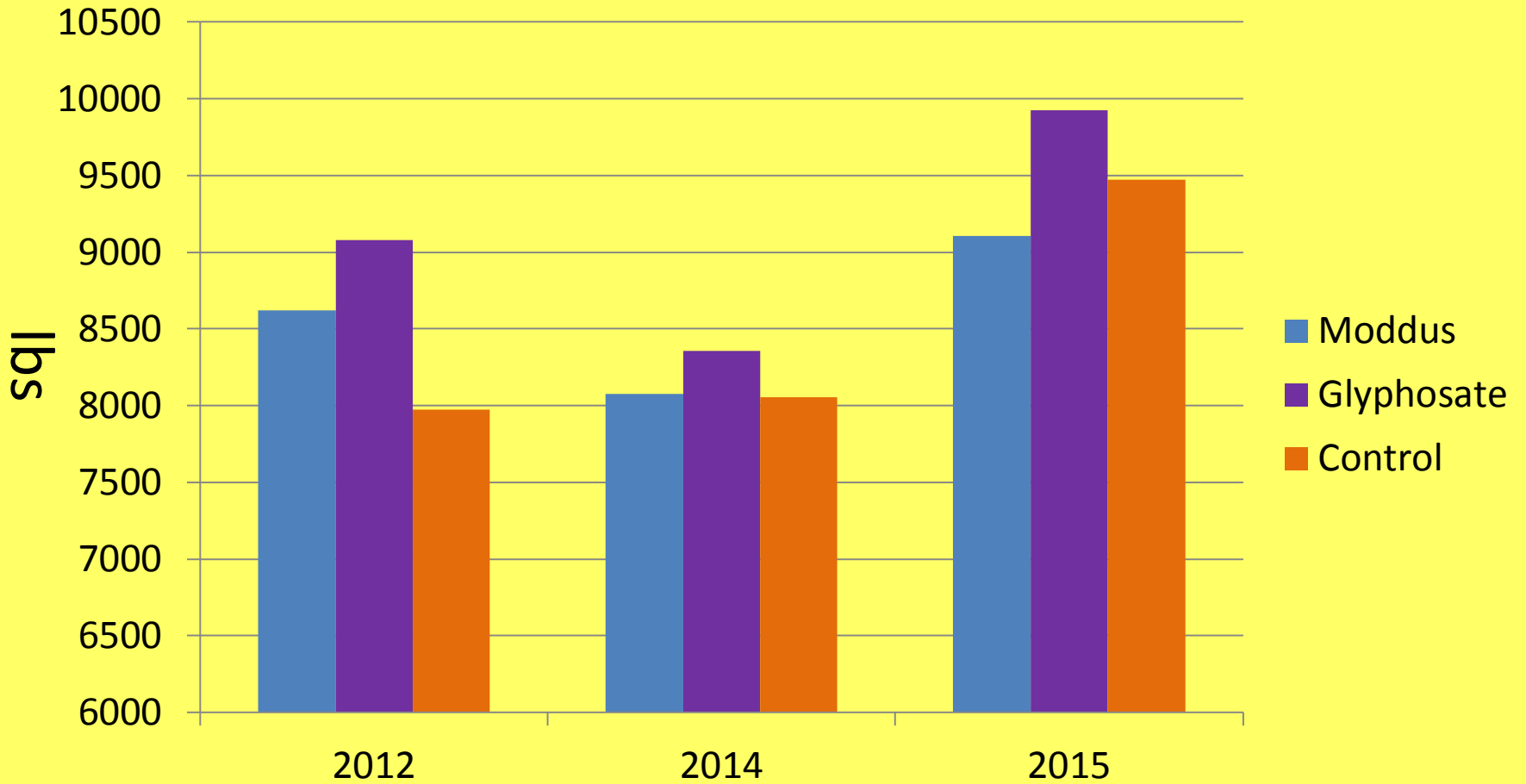
L 01-283 Sugar/Acre



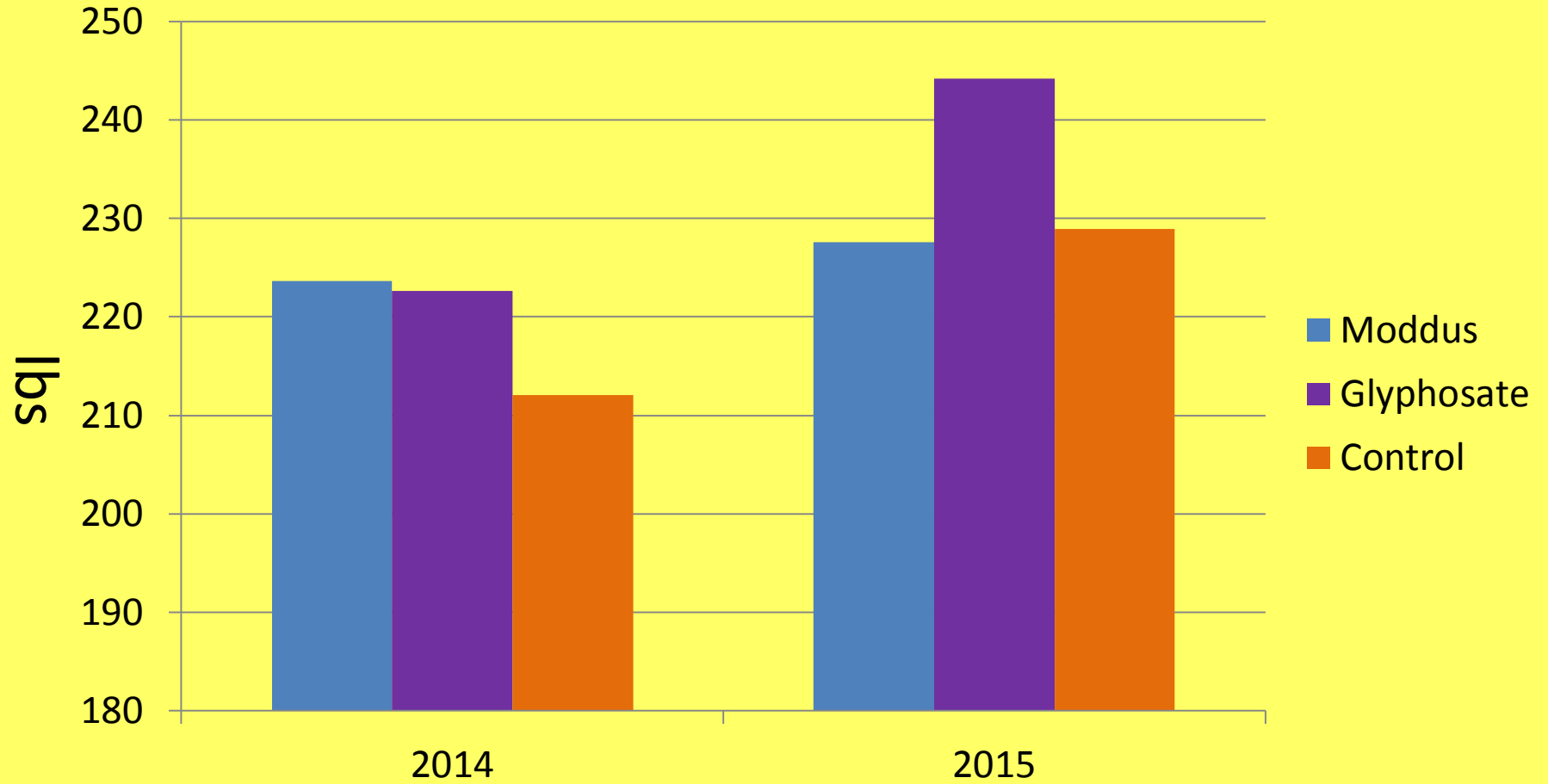
HoCP 96-540 TRS



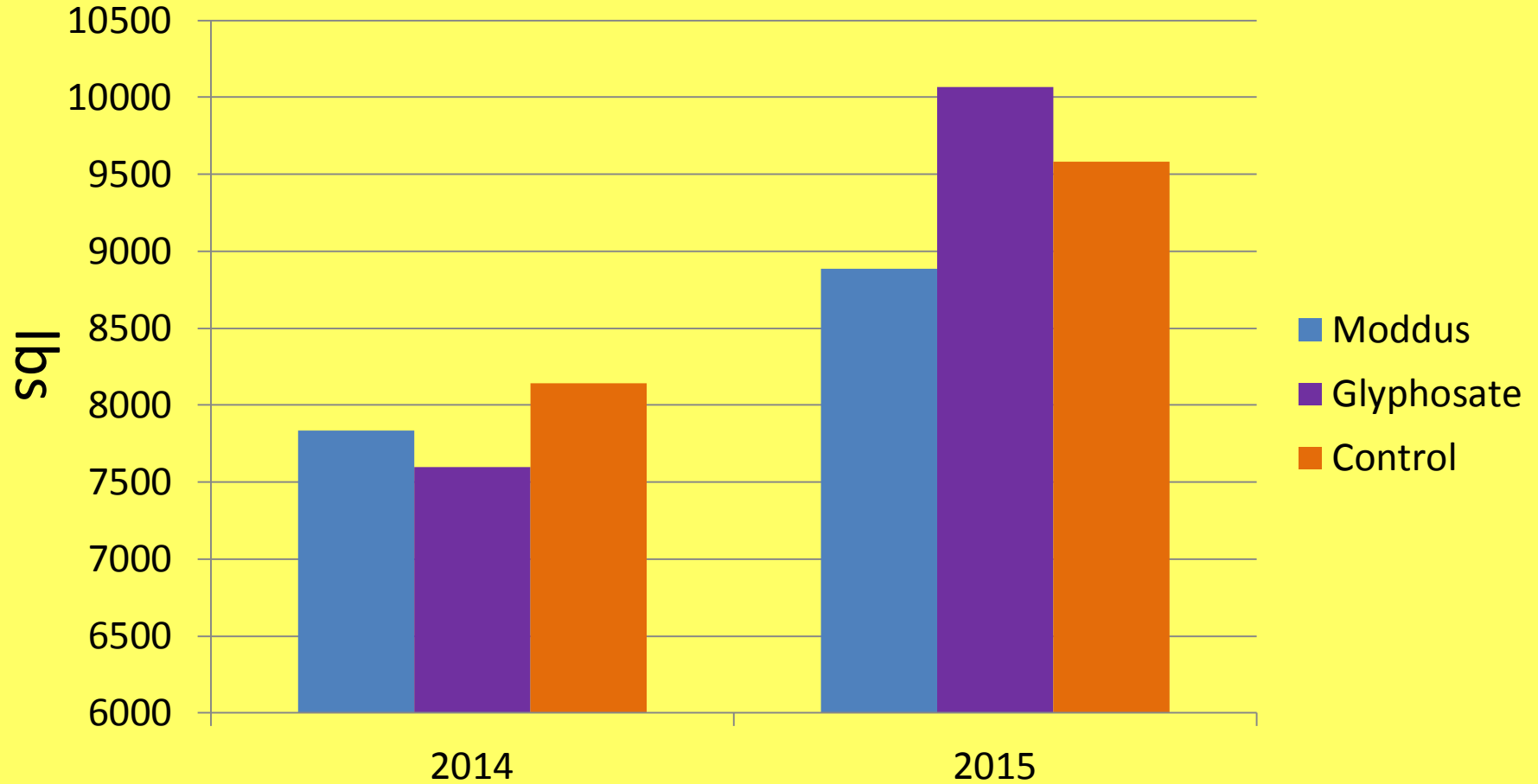
HoCP 96-540 Sugar/Acre



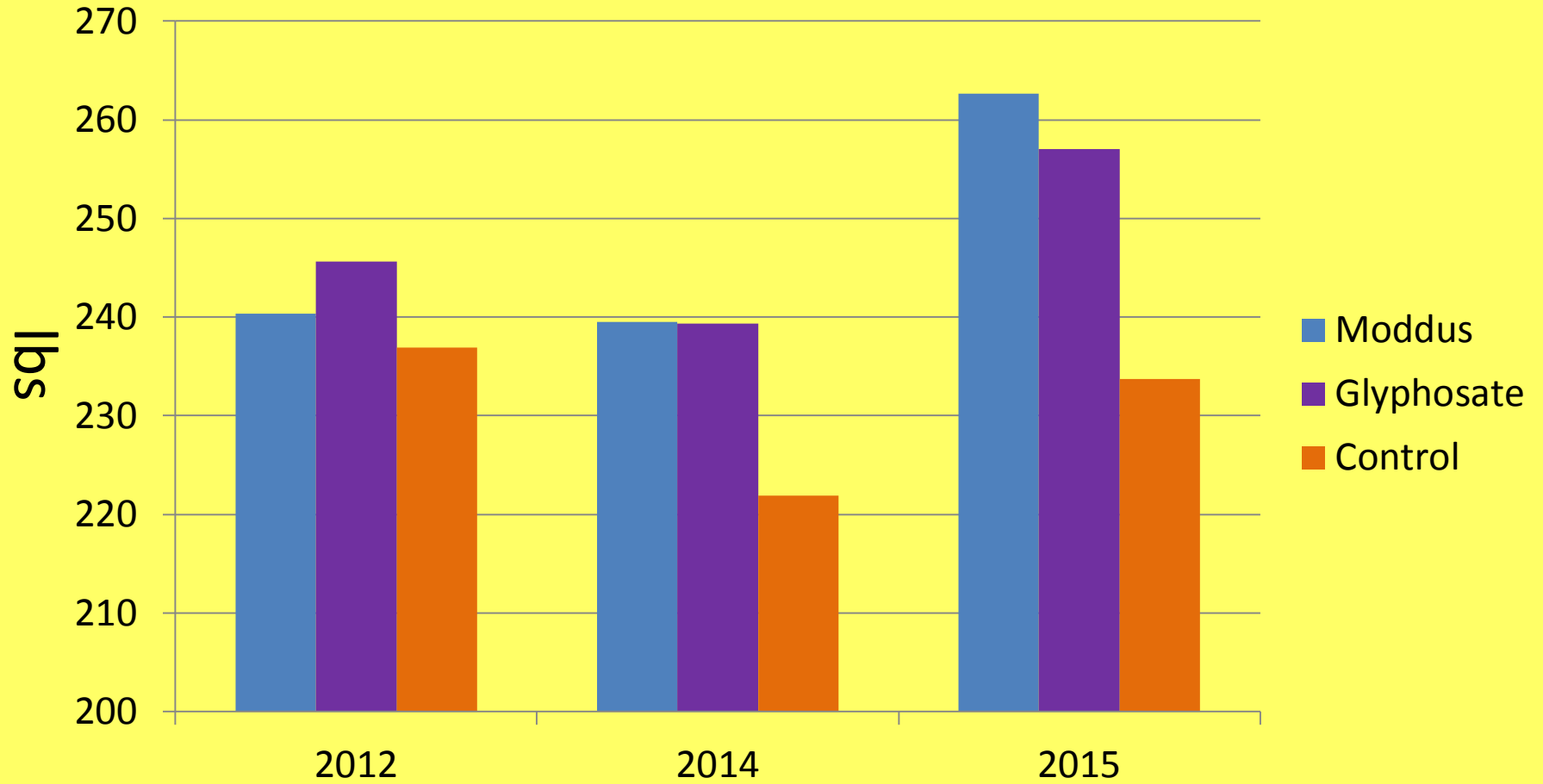
L 01-299 TRS



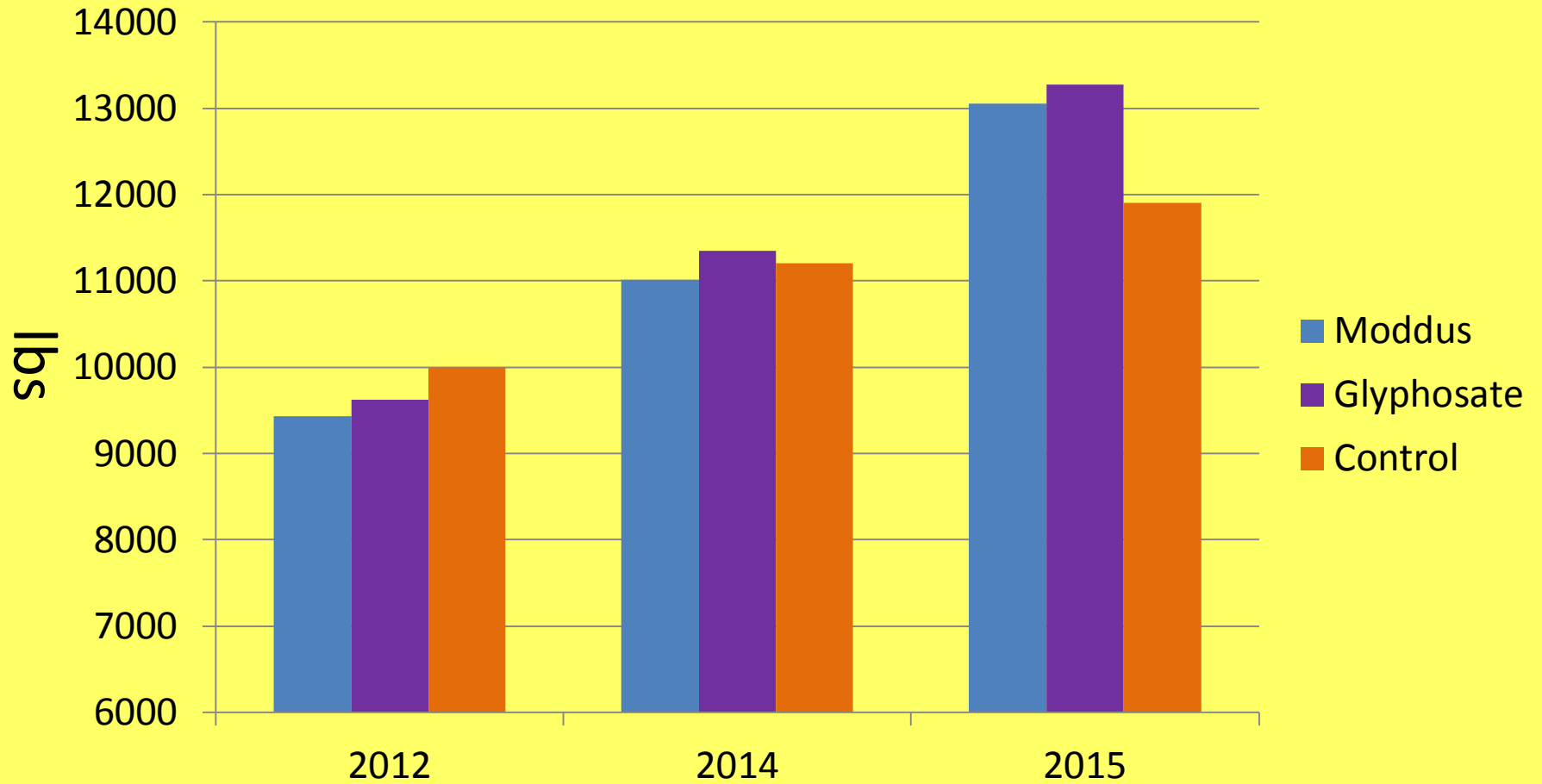
L 01-299 Sugar/Acre



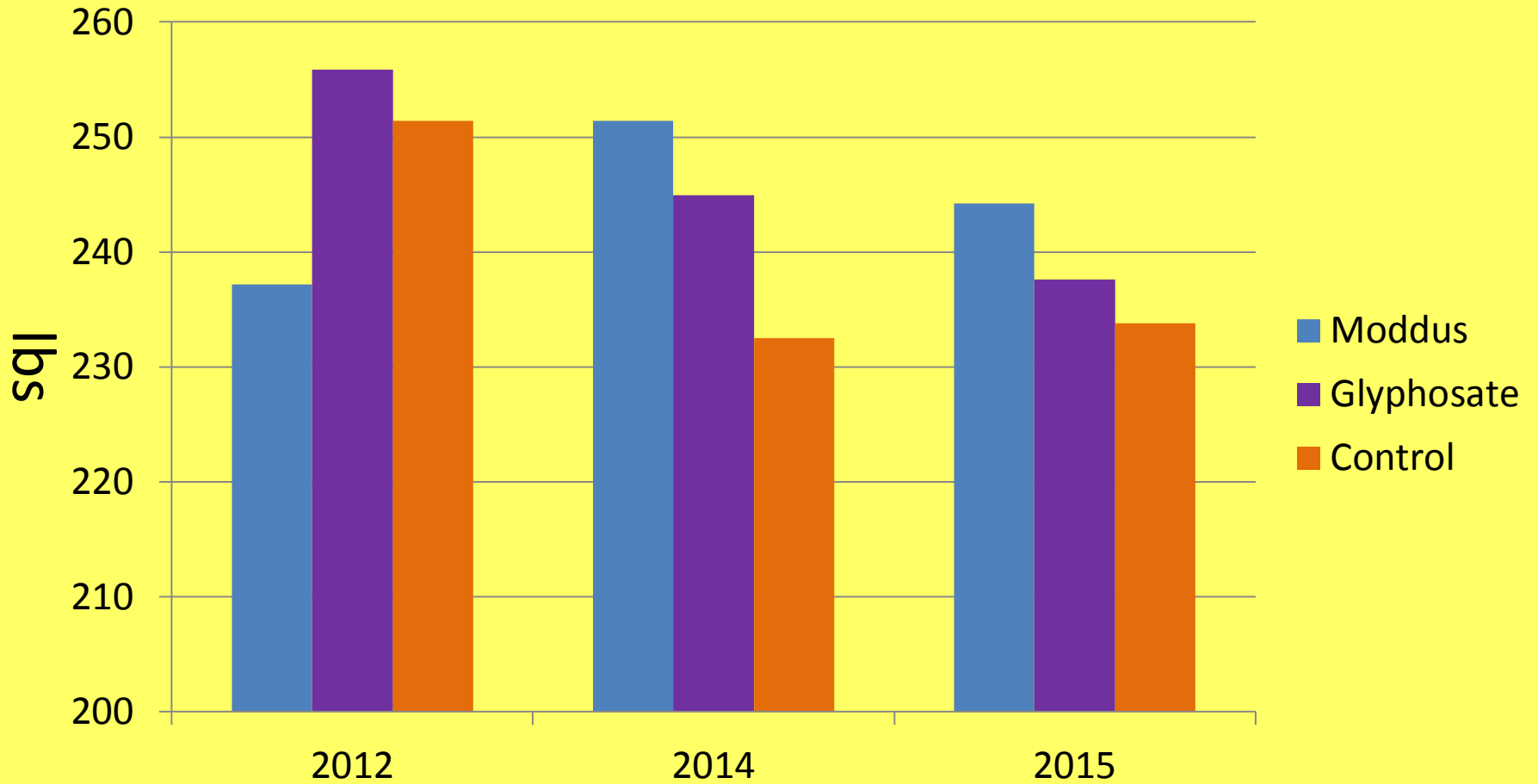
L 99-226 TRS



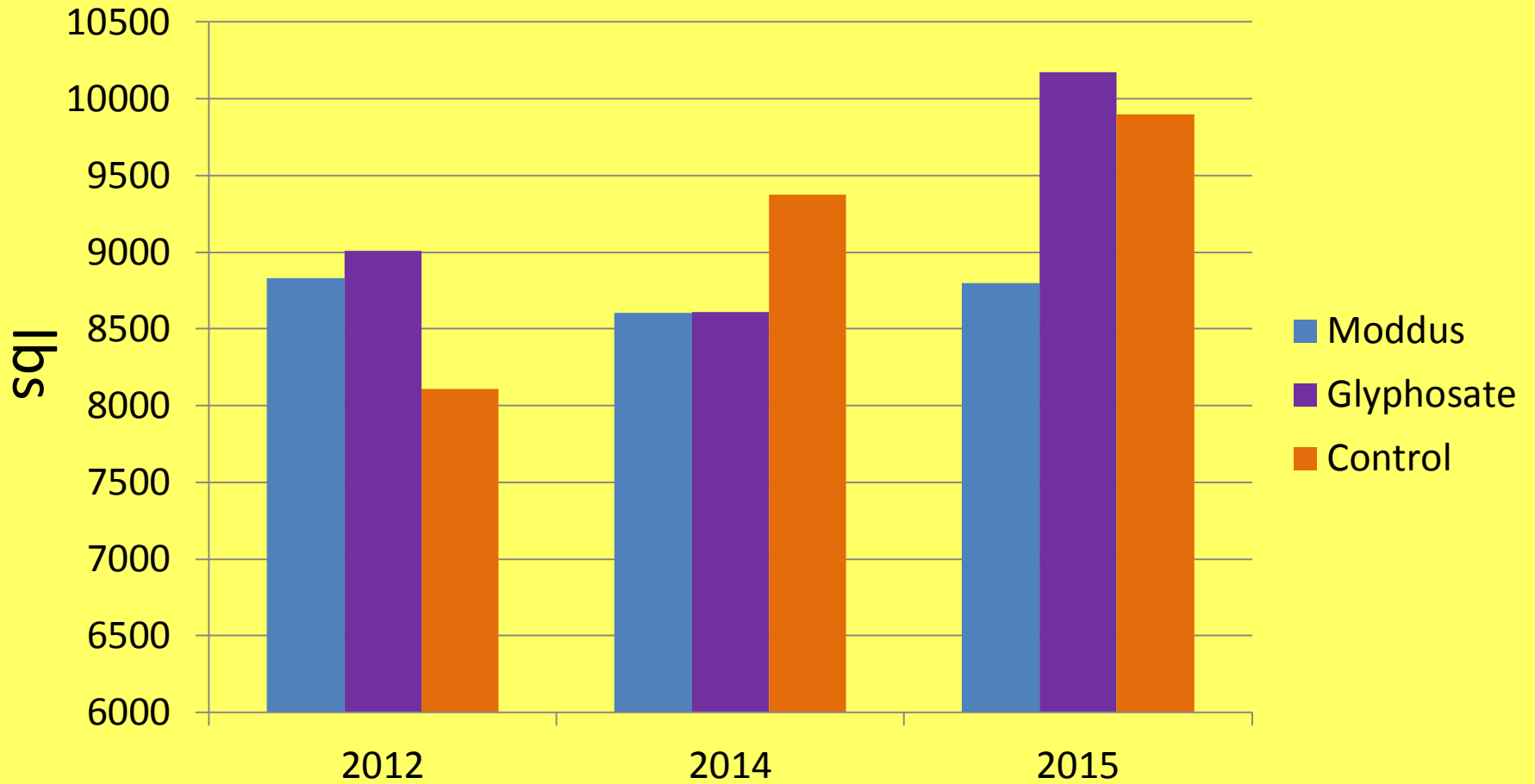
L 99-226 Sugar/Acre



HoCP 04-838 TRS



HoCP 04-838 Sugar/Acre



Conclusion

All varieties do not respond equally to chemical ripeners.

The response of the different varieties to Moddus and Glyphosate was not always consistent between years of the trial.

Glyphosate typically will give the better sugar per acre results, for most varieties.

Shoots emergence may be delayed the following year, however by layby time, there is no significant difference between the treatments.