

Summary of Sugarcane Borer Yield Reduction Studies (YRS)

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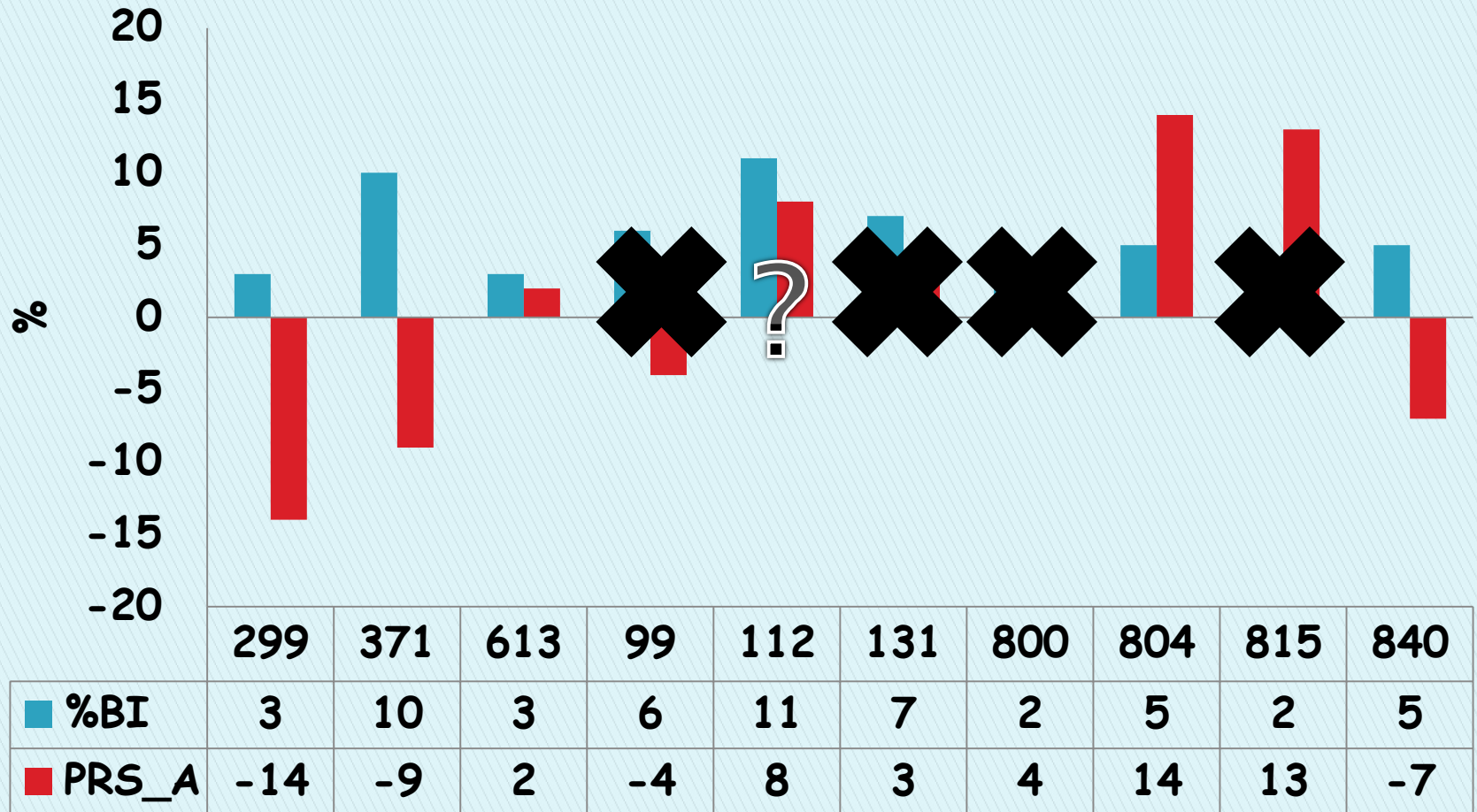


What and the Why of YRS

- ▶ The Alpha and the Omega approach
 - $A = \text{RSB}$
 - $\Omega = \text{YRS}$
- ▶ Maximum of 10 varieties per evaluation
 - Standards?
- ▶ Artificially supplemented SCB
- ▶ Split plot design replicated four times
 - 16 ft; 3 row plots
- ▶ Combined harvested and sub-sampled by core method to determine sugar yields

Buffer L01-299	Corn	Buffer 299	Corn	Buffer 299	Corn	Buffer 299	Corn	Buffer 299	Corn	Buffer L01-299
		L03-371		HoCP09-815		L01-299		L03-371		
		HoCP09-804		L03-371		Ho07-613		HoCP09-804		
		HoCP09-815		L01-299		L09-112		L09-099		
		HoCP09-800		L09-099		HoCP09-800		L09-112		
		L01-299		HoCP09-804		L03-371		L01-299		
		L09-099		L09-131		HoCP09-815		HoCP09-800		
		L09-112		Ho09-840		L09-131		HoCP09-815		
		L09-131		L09-112		Ho09-840		L09-131		
		Ho07-613		HoCP09-800		L09-099		Ho07-613		
		Ho09-840		Ho07-613		HoCP09-804		Ho09-840		
		HoCP09-800		L03-371		HoCP09-800		Ho09-840		
		L09-099		HoCP09-800		HoCP09-815		L09-112		
		L01-299		HoCP09-804		Ho09-840		L03-371		
		L09-112		Ho09-840		L09-099		HoCP09-815		
		L03-371		HoCP09-815		L09-131		Ho07-613		
		HoCP09-815		L09-099		L09-112		L09-131		
		Ho07-613		L09-131		HoCP09-804		L09-099		
		L09-131		L01-299		Ho07-613		L01-299		
		Ho09-840		Ho07-613		L03-371		HoCP09-804		
		HoCP09-804		L09-112		L01-299		HoCP09-800		
		Buffer 299		Buffer 299		Buffer 299		Buffer 299		

Results from the 2013 YRS



2012 YRS Corn Inoculation Rows

Number of corn plants	Number of SCB
9,800 per acre	31,000 per acre



What happened?



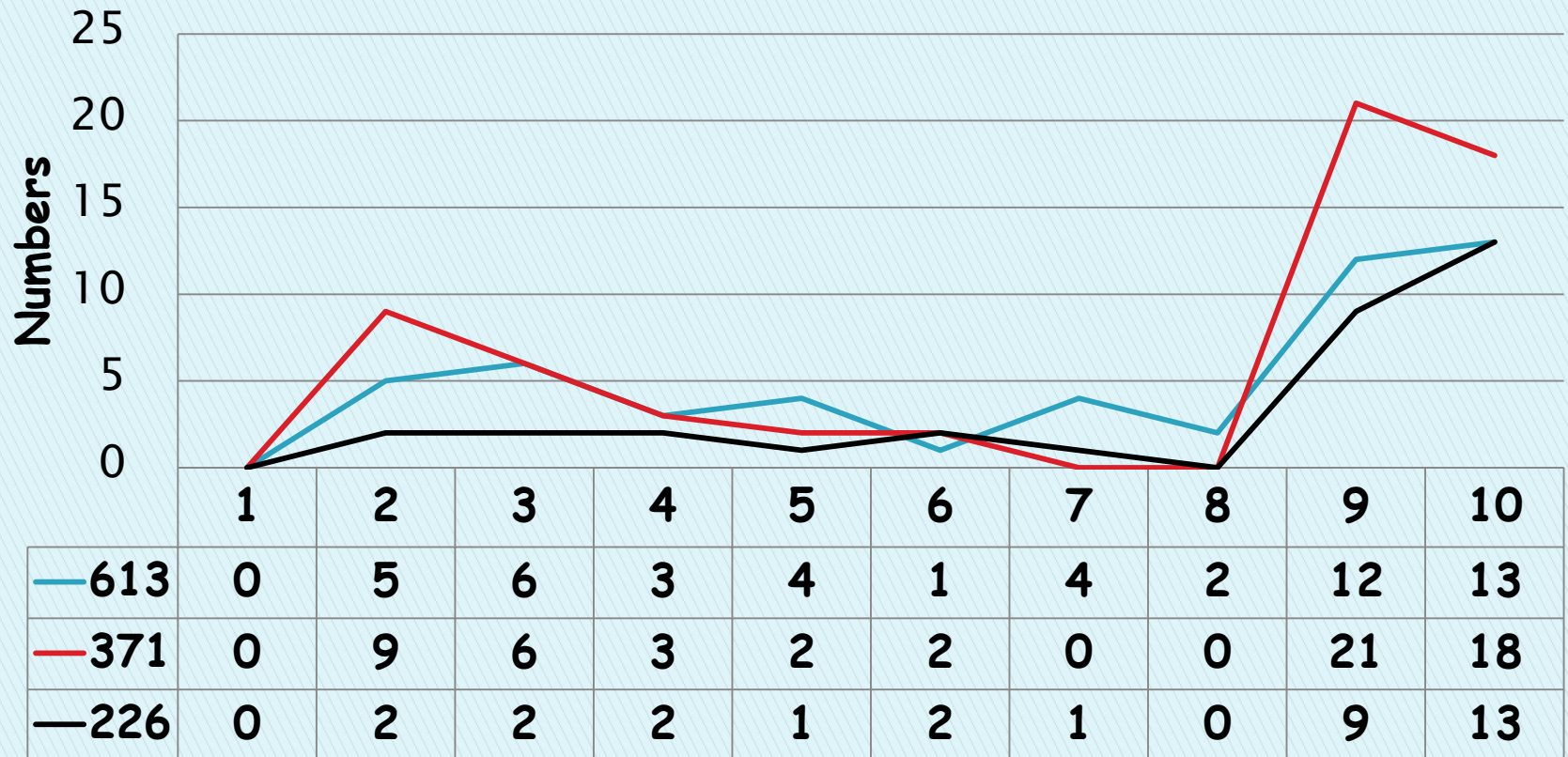
**Cuban fly
= 60%**



Ho 07-613

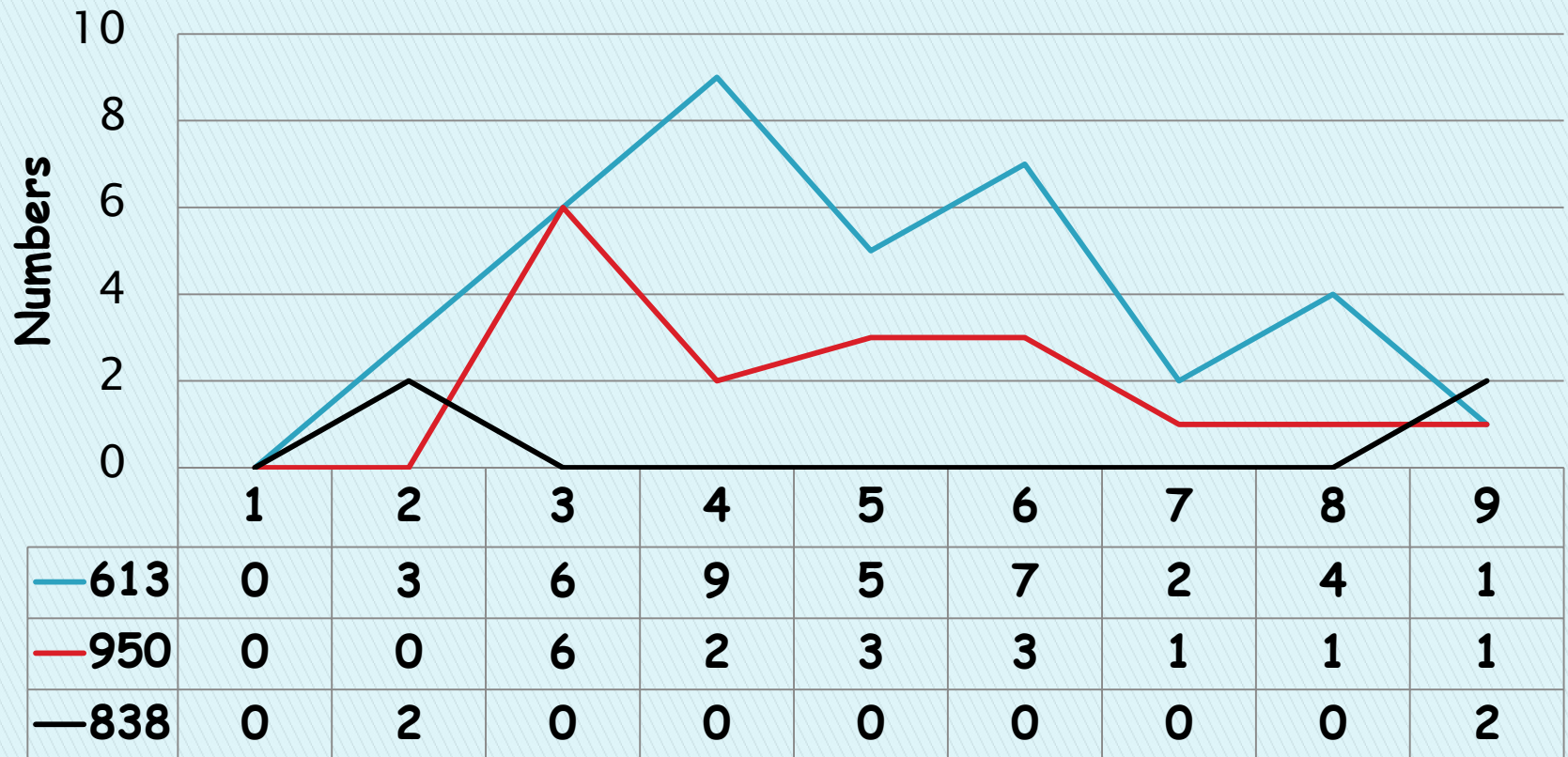
2011 Infestation Counts

Sugarcane borer larvae (n = 40)



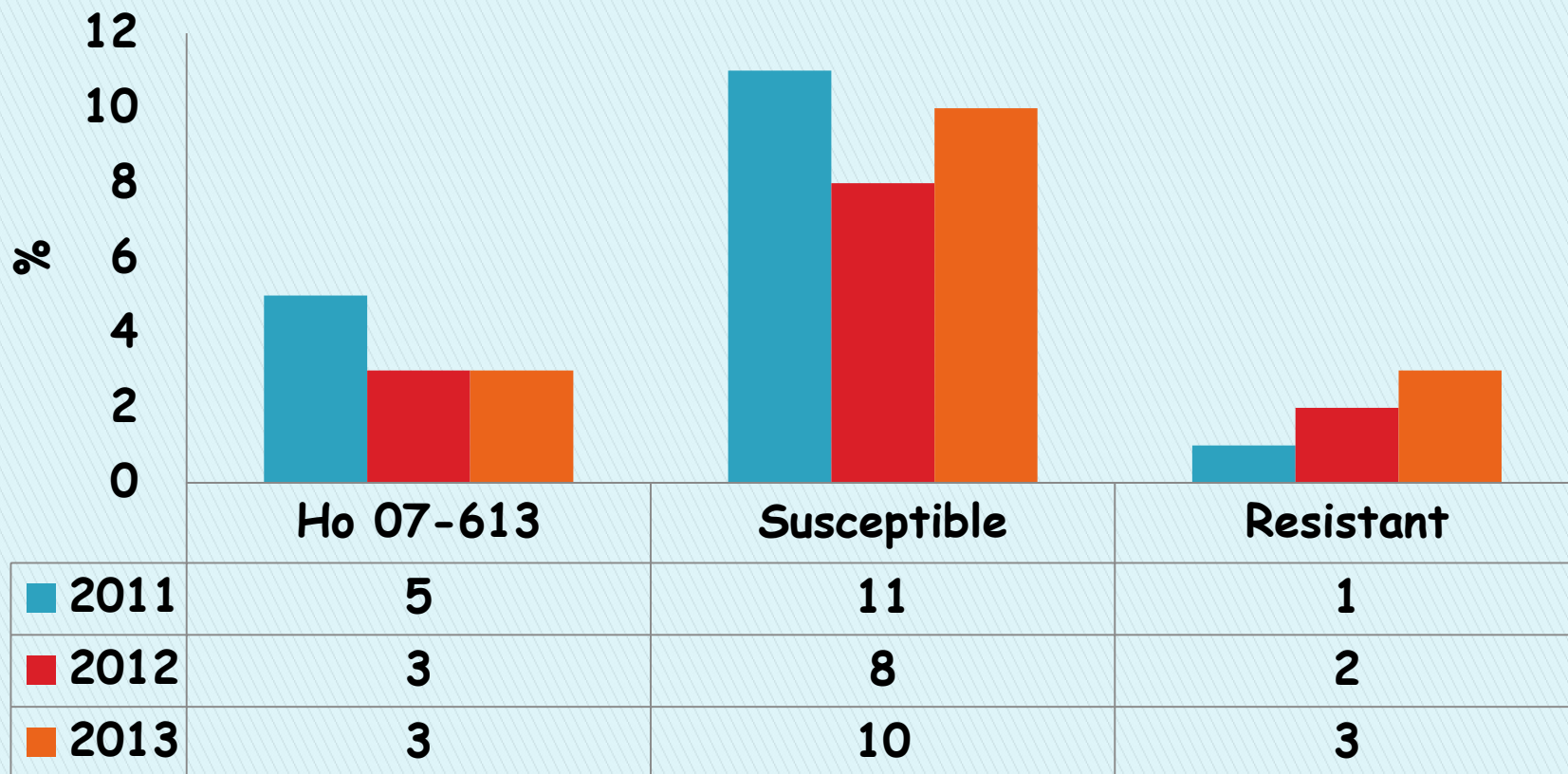
2012 Infestation Counts

Sugarcane borer larvae (n = 40)



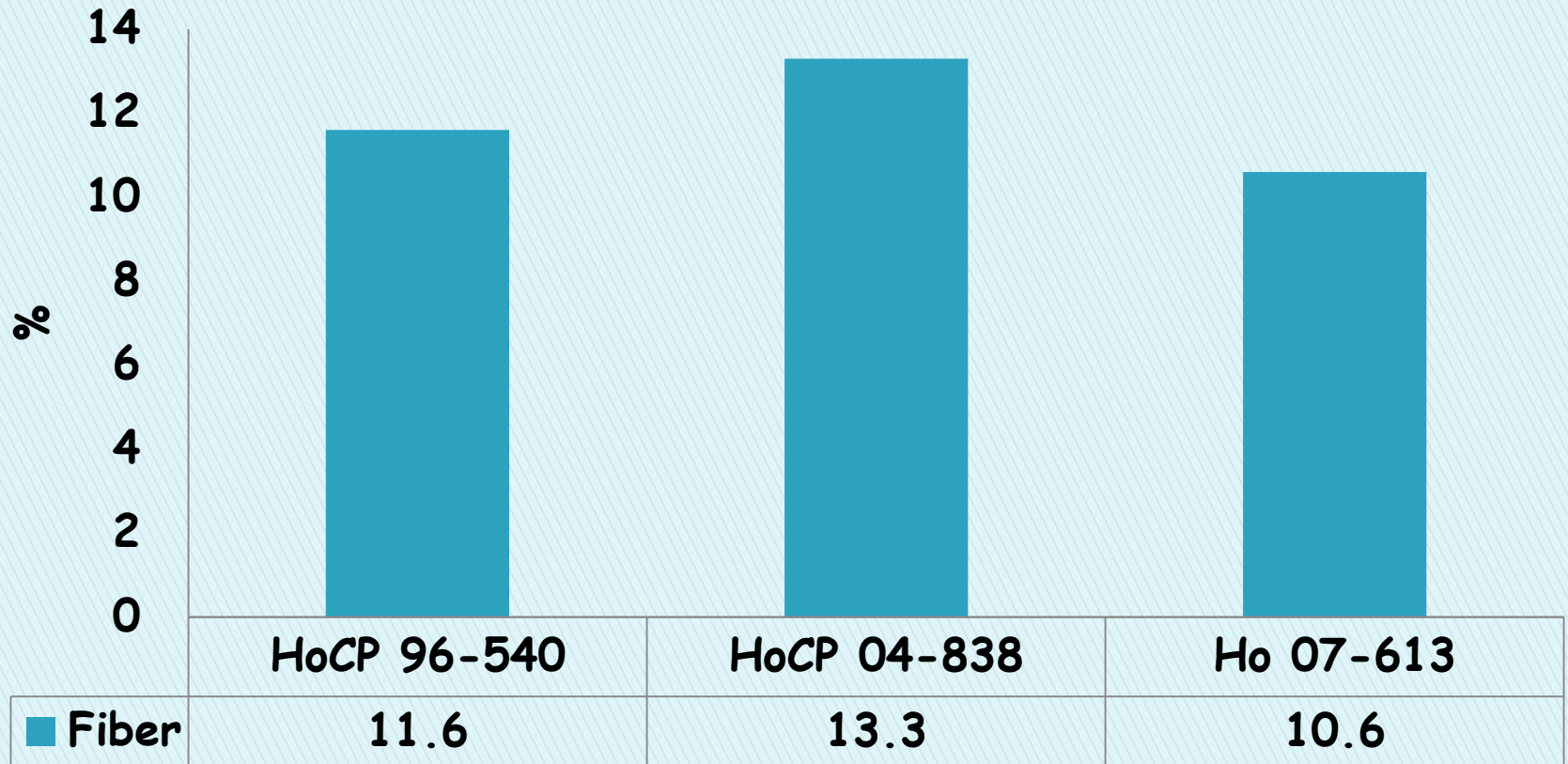
Response of Ho 07-613 to SCB

Percent bored internodes



Percent Fiber of Three Sugarcane Varieties

Fiber



Summary

- ▶ Better up our game
- ▶ Ho 07-613
 - Resistant under low to moderate pressure
 - Brittle
 - Will need to keep a close eye
- ▶ Adjudicated by consultants
- ▶ Ho 09-840 or HoCP 09-804 next release?

2014 YRS
HoCP00-950
HoCP04-838
Ho07-613
L09-112
HoCP09-804
Ho09-840
Ho10-937
Ho11-512
Ho11-529
Ho11-576