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Primary Industries



Australian Government

Cotton Research and
Development Corporation



Southern Cotton

Validating Cotton IPM

CRDC project DAN 1501

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2015-16

Project Aims

- To validate thrips thresholds and management strategies for southern conditions



Thrips related trials conducted

2015/16 season

- Simulated thrips damage trial
 - 100% leaf removal at 2,4,& 6 leaf stage all plants and 75% of plants, 75% leaf removal treatment and control
- Commercial scale thrips threshold trials (2 sites)
- Seasonal patterns monitoring at 4 sites
- Small plot insecticide efficacy trial



Simulated thrips damage and cotton compensation trial – 2015/16

- 3rd season 74 BRF
- Sowing date: 9 Oct 2015 (1st water 11/10/15)
- Emergence: 14 Oct (density 9.7m⁻¹)
- 1st cut: 3 Nov 2014
- 2nd cut: 17 Nov 2015
- 3rd cut: 3 Dec 2015
- 1st defoliation: 23 Mar 2015
- 2nd defoliation: 1 Apr 2015
- Harvest: 20 Apr 2016



Height by date

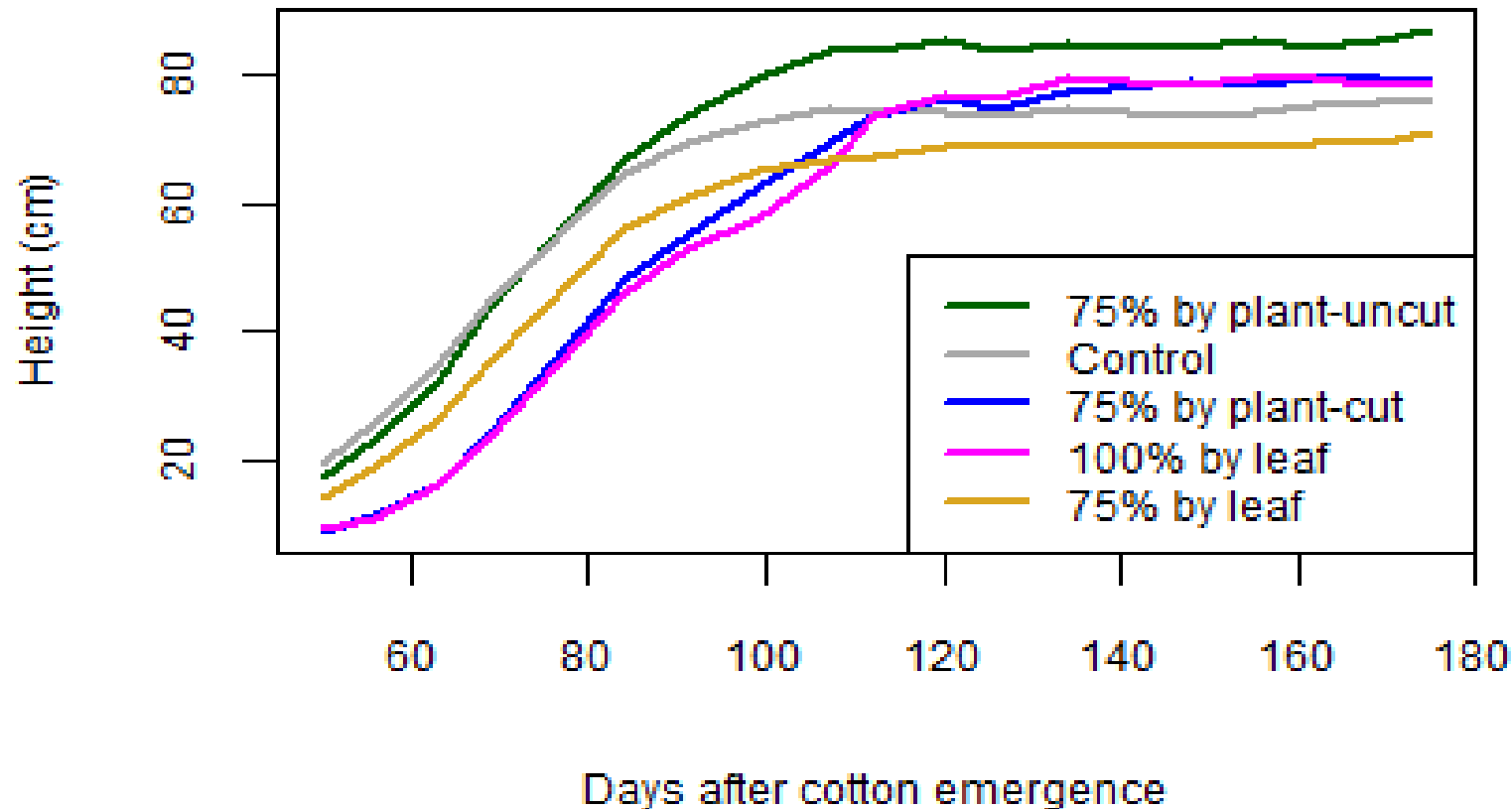
All Dec monitoring dates – significant differences

Control>L75>P75>L100

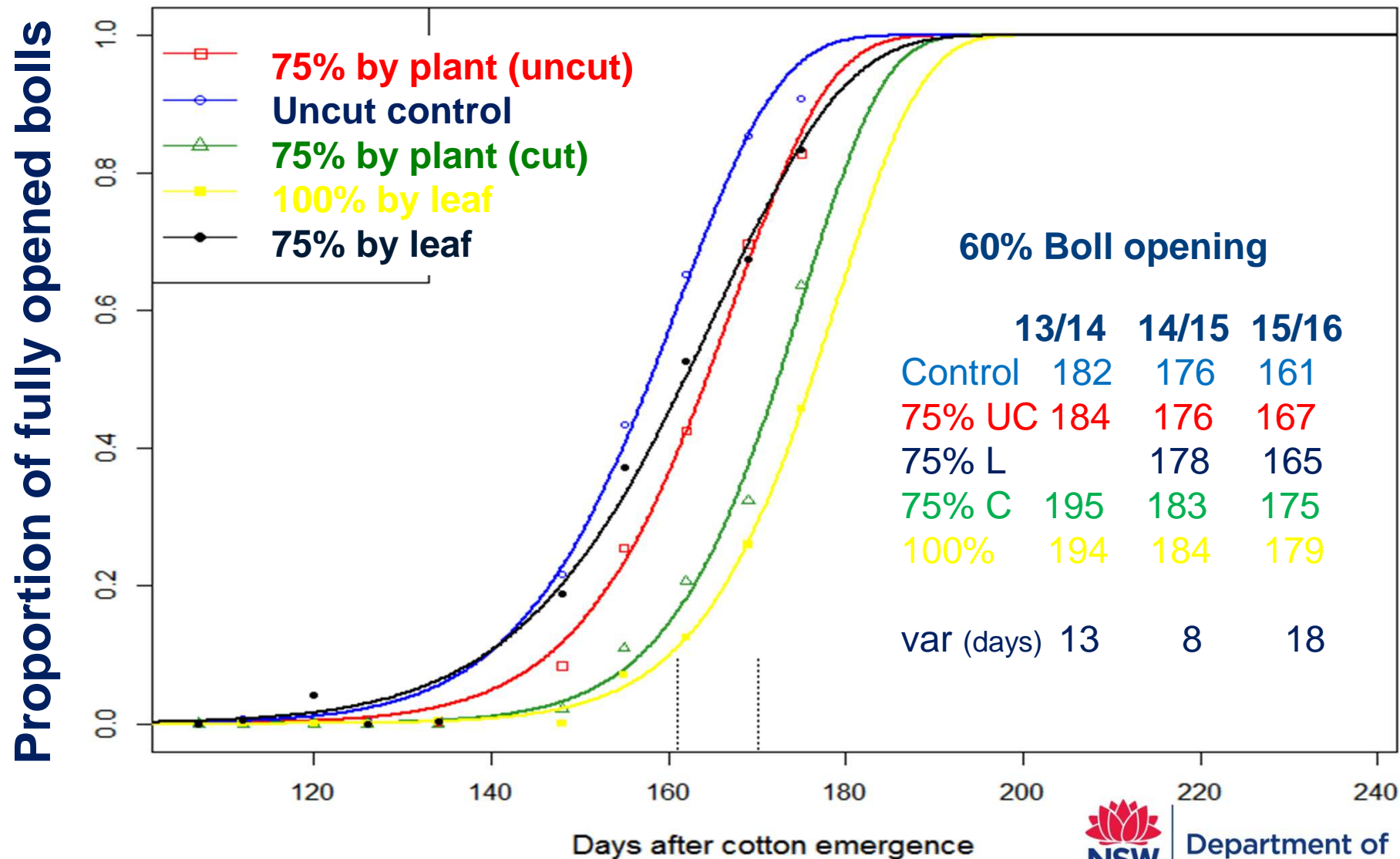
Jan => Control> L75=P75=L100

> 29/1/16 all =

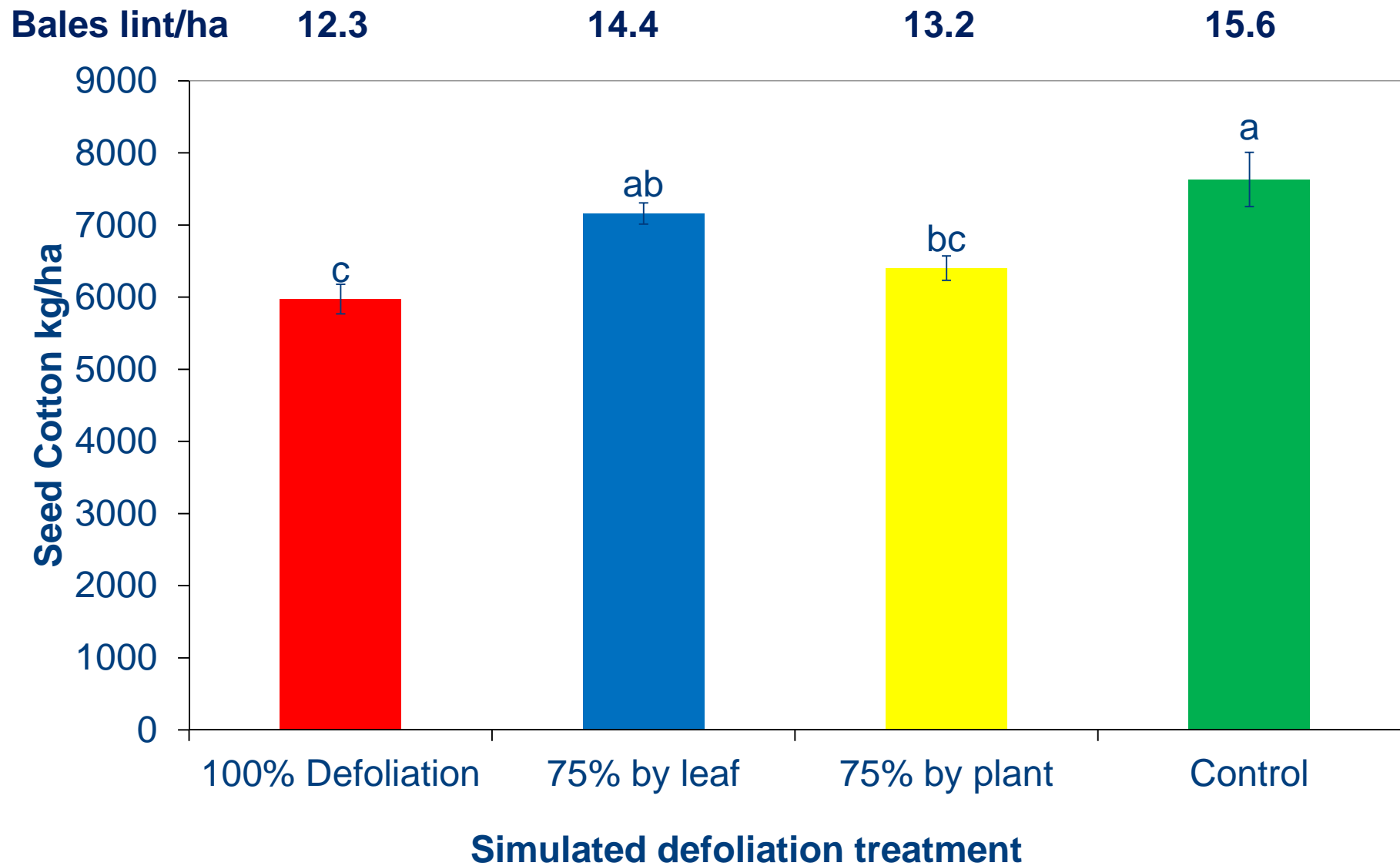
Before pooling 75% Cut & and 75% Uncut



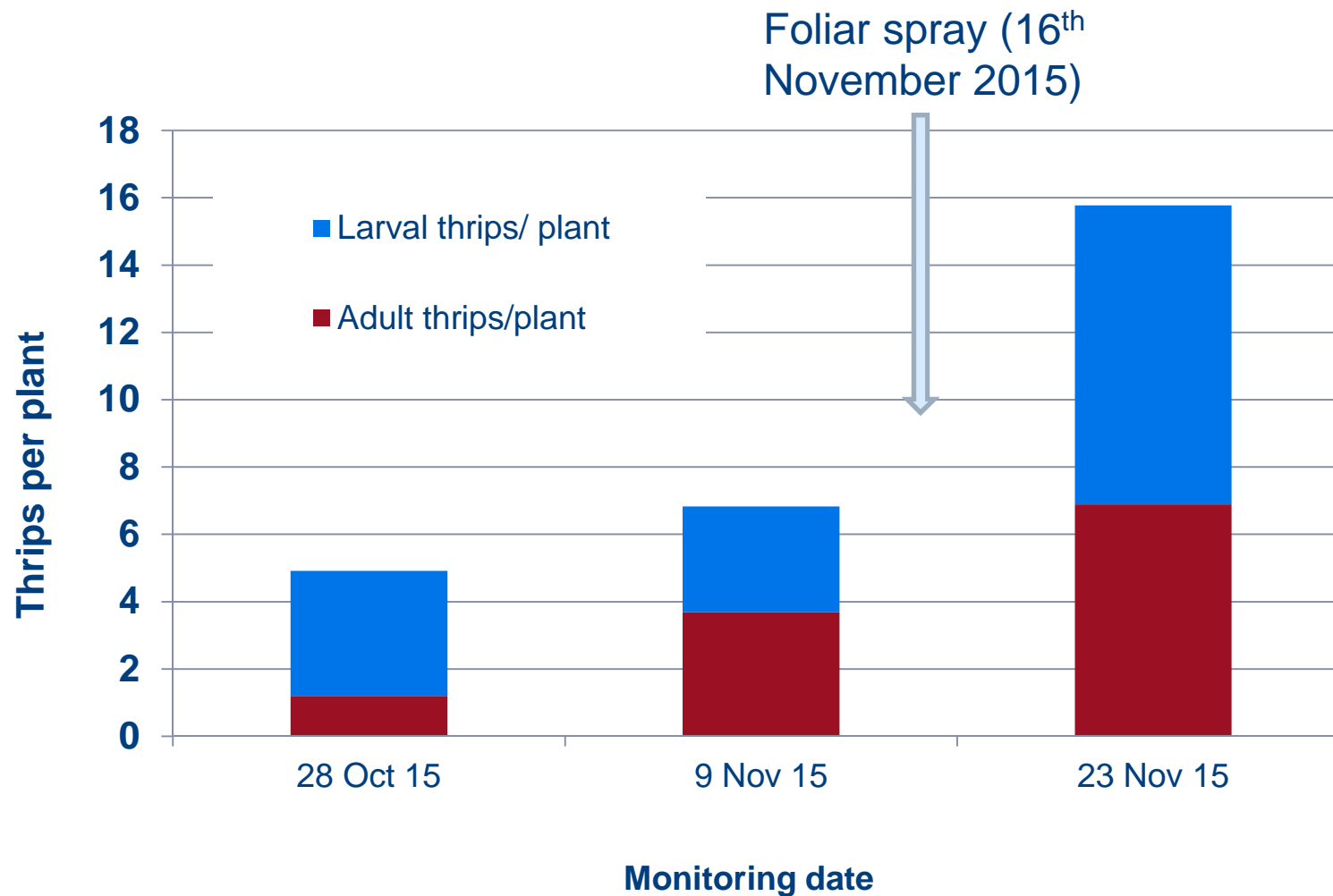
Effects of defoliation on maturity date 15/16



Defoliation trial 15/16



Whitton/IREC Thrips threshold trial 15/16



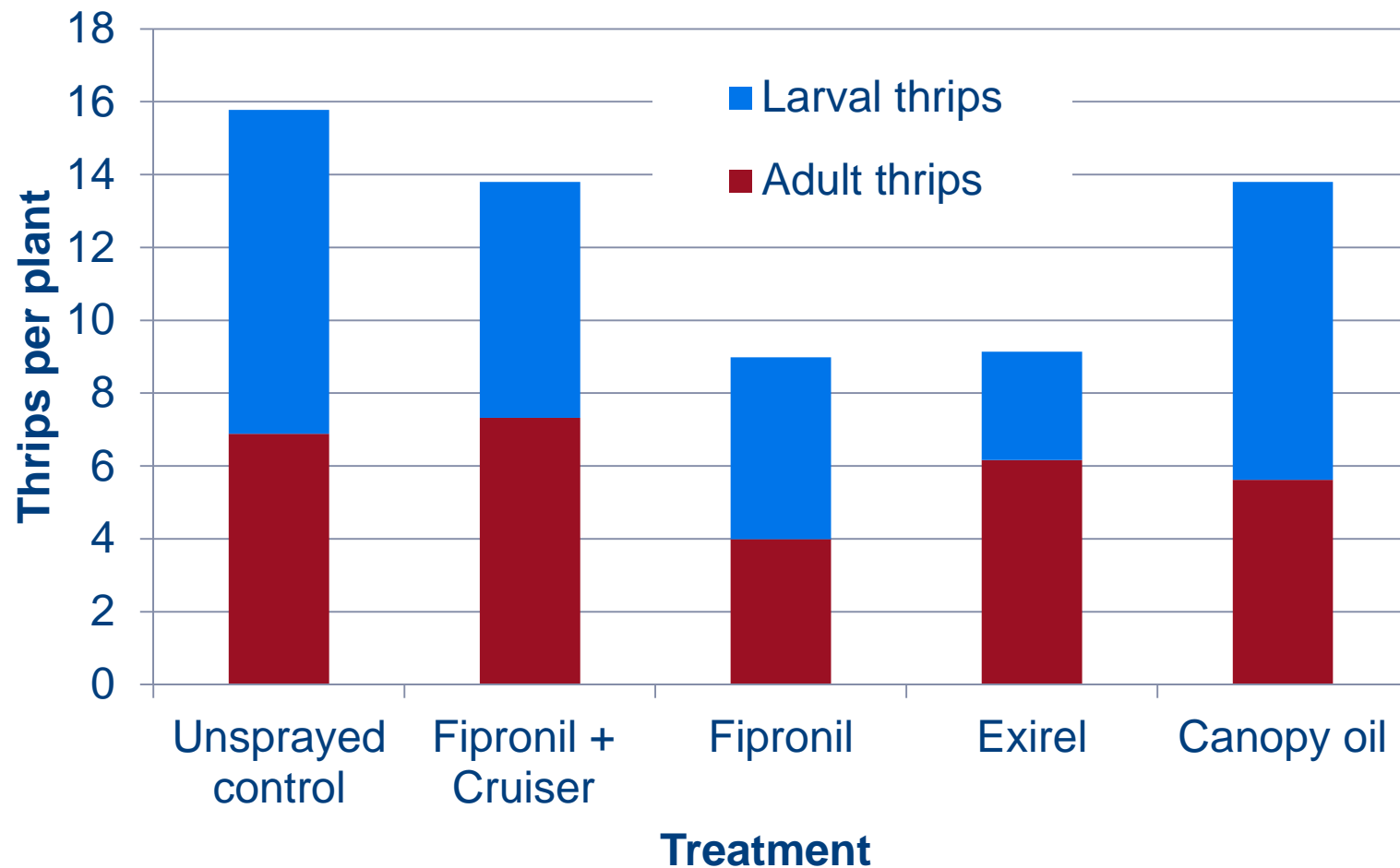
Planted: 9 Oct



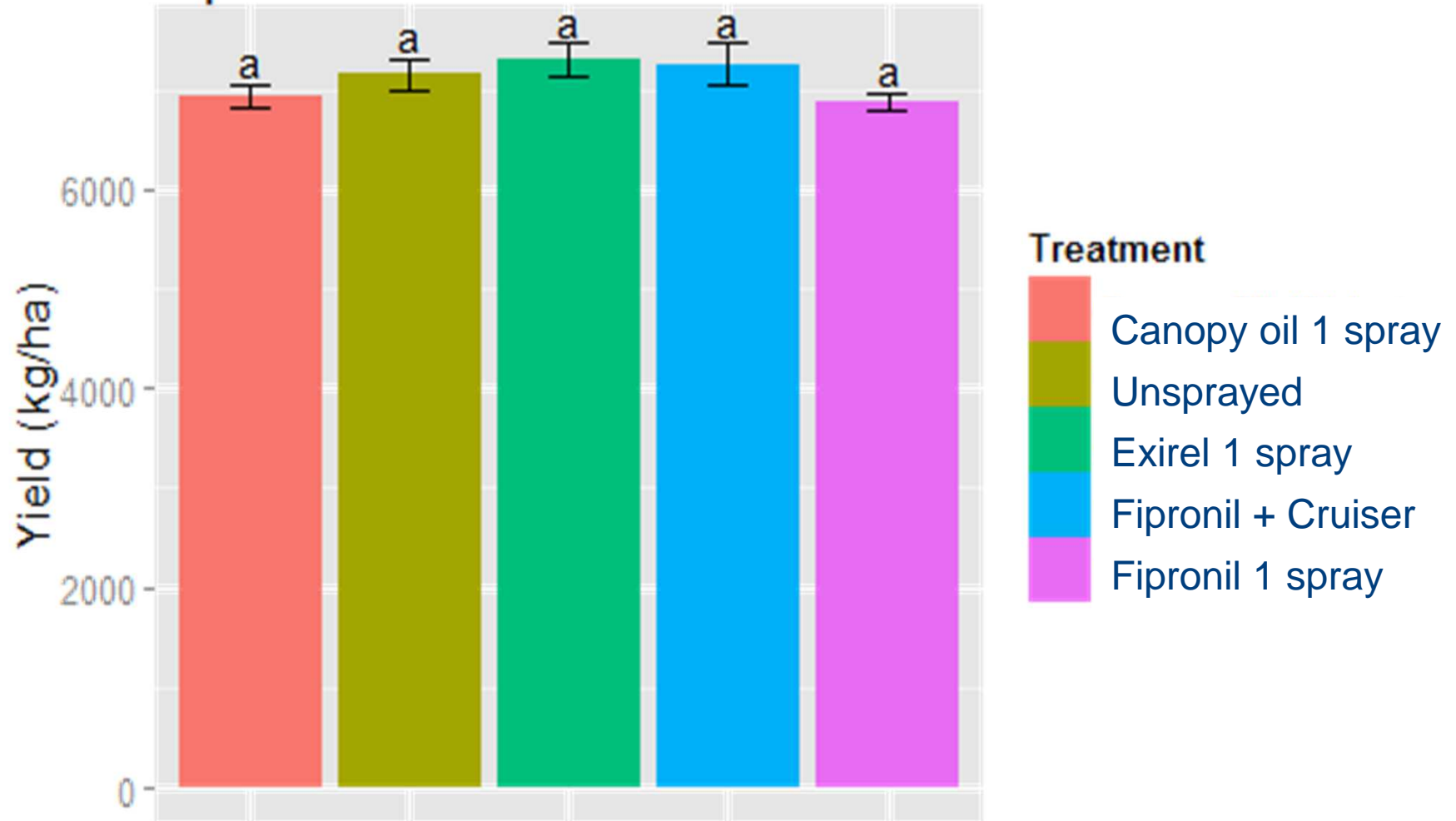
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Whitton/IREC Thrips threshold trial 15/16

23 November (7 day post foliar spray)



Thrips Threshold Trial 2015-16 - IREC



Whitton/IREC Thrips threshold trial 15/16

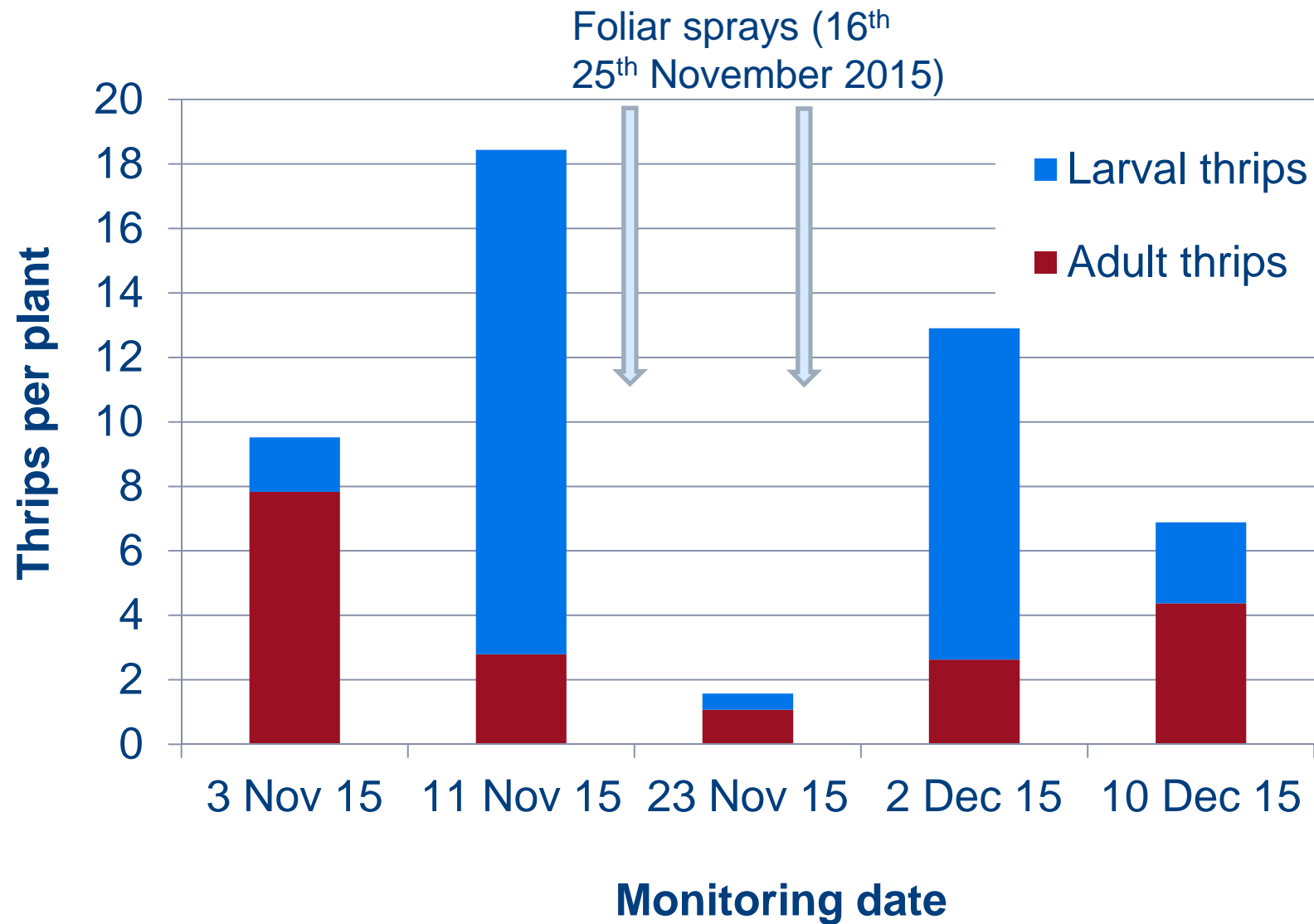
Harvest data bales/ha

Treatment	Hand harvest	Machine harvest
Unsprayed	13.04	14.68
Fipronil + Cruiser	13.34	14.82
Fipronil	14.33	13.88
Exirel	15.32	14.79
Canopy oil	14.74	14.05



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Point Farms thrips threshold trial 15/16

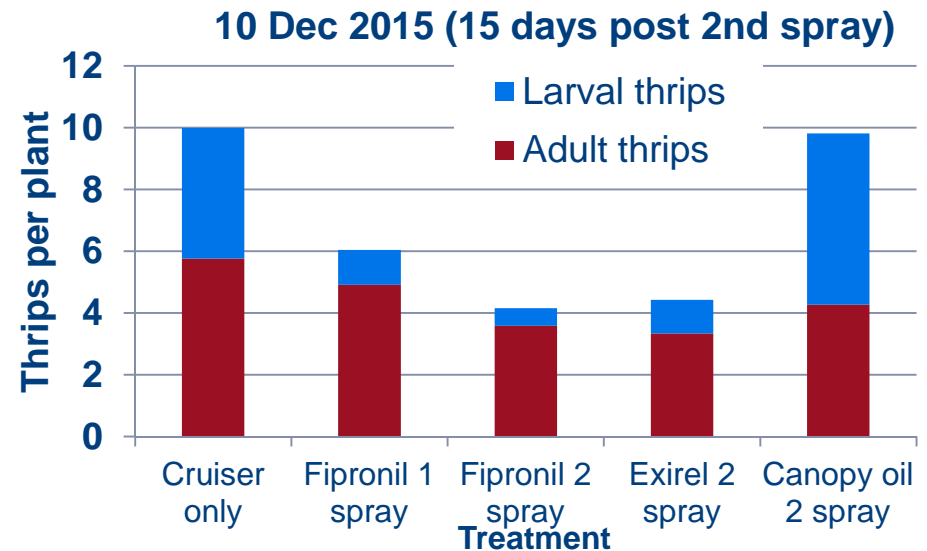
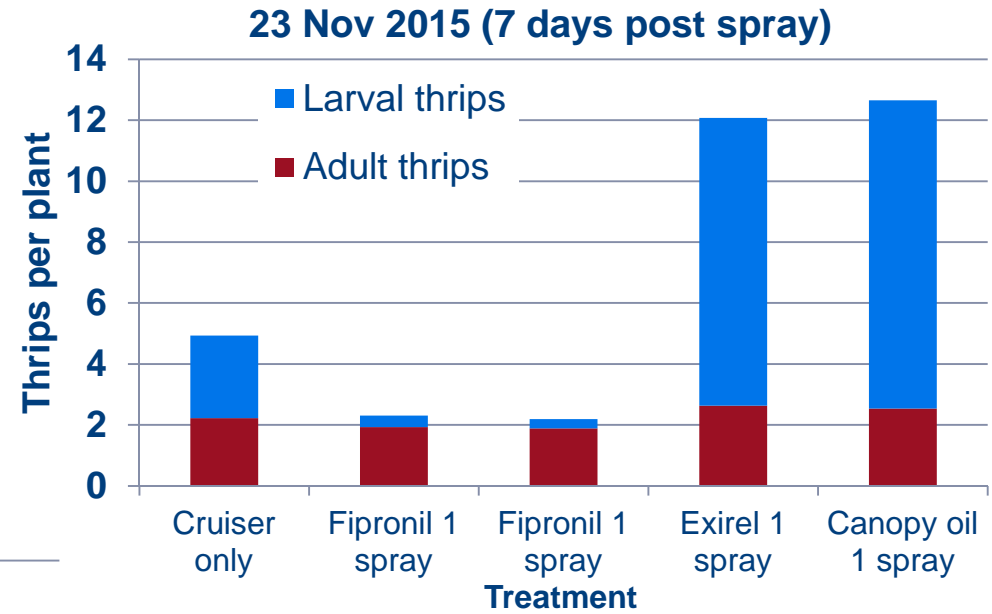
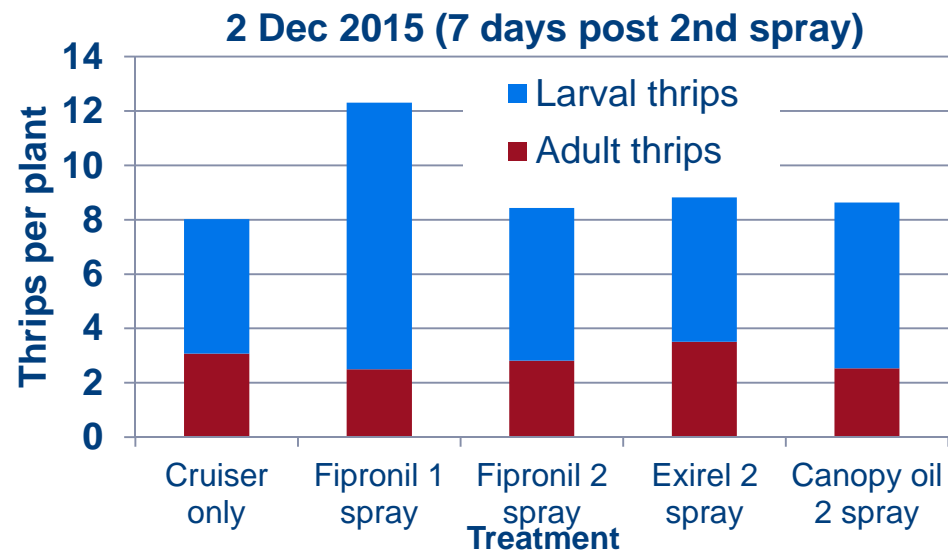


Planted: 16 Oct



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Point Farms thrips threshold trial 15/16



16 Nov

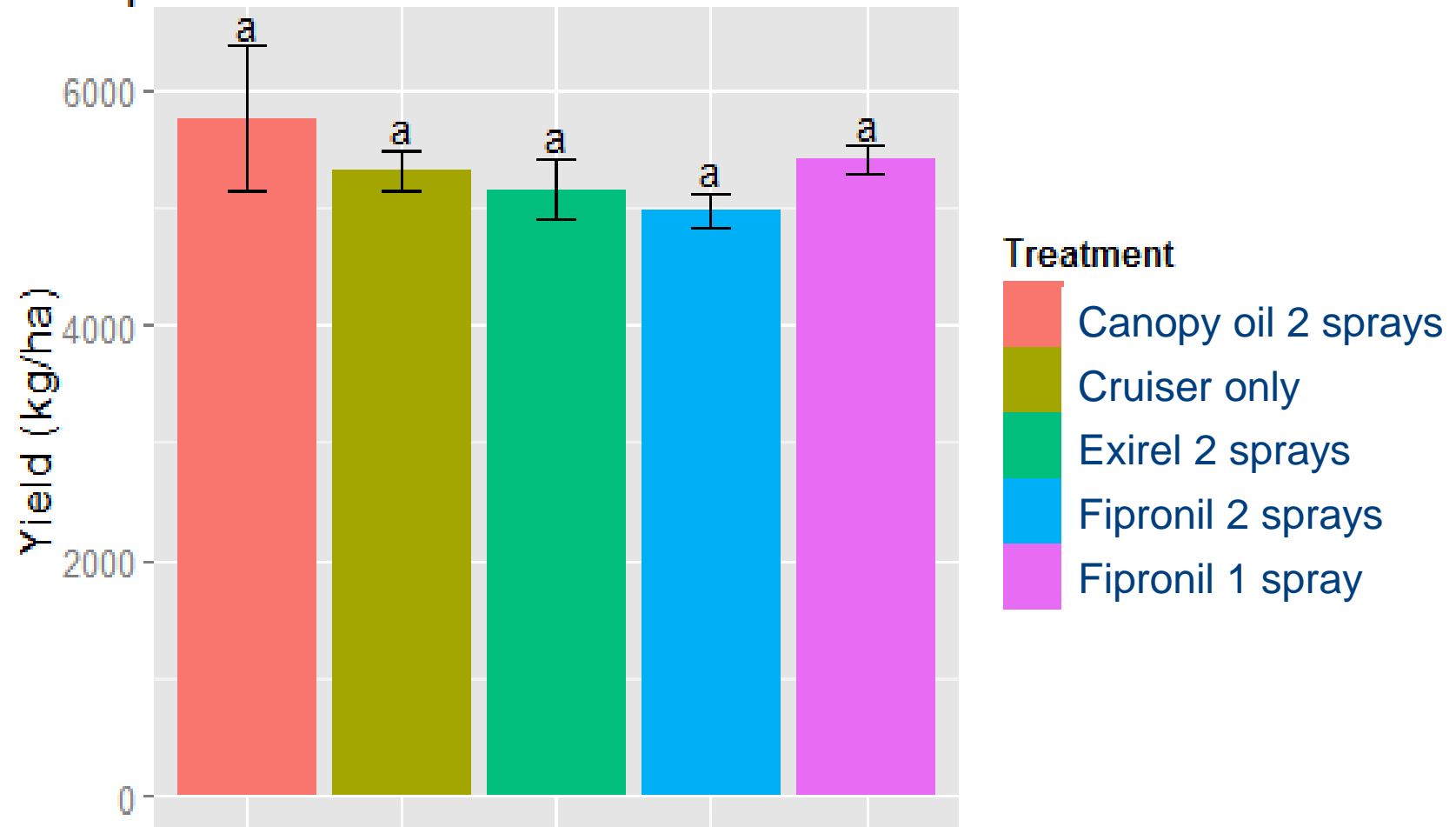


2 Dec



PF

Thrips Threshold Trial 2015-16 - Point Farms



Point Farms thrips threshold trial 15/16

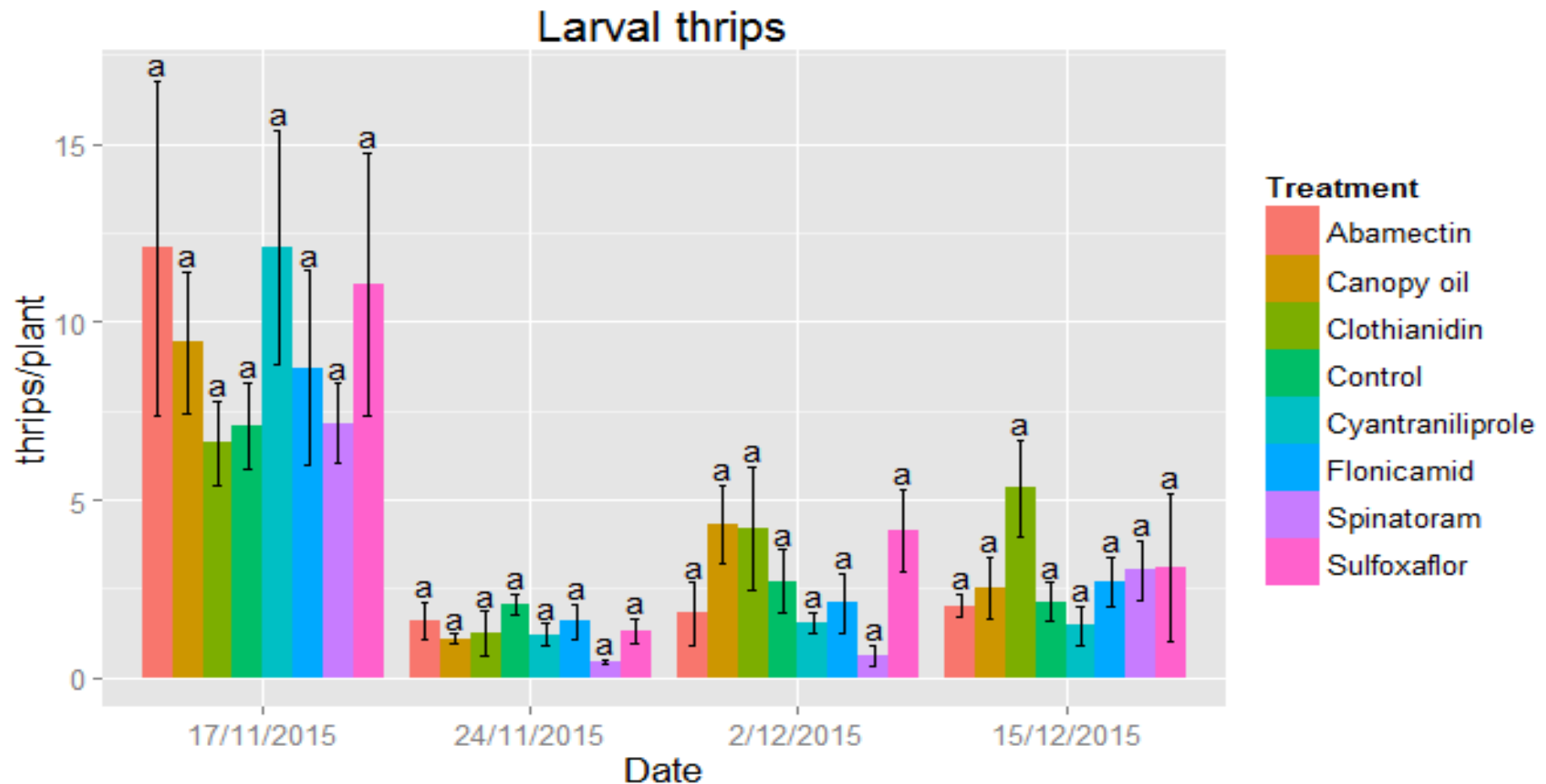
Harvest data bales/ha

Treatment	Hand harvest	Machine harvest
Cruiser only	12.2	9.89
Fipronil 1 spray	14.31	10.72
Fipronil 2 spray	12.36	10.31
Exirel 2 spray	13.77	10.43
Canopy oil 2 spray	11.99	11.19

Small plot insecticide trial – 2015/16

- 2nd season 74 BRF
- Sowing date: 9 Oct 2015 (1st water 11/10/15)
- Emergence: 14 Oct (density 9.7m⁻¹)
- Presample: 17/11/15
- 1st spray: 18/11/15 [7:30-10:30am; 2-10 km/hr; 2-3 node]
- 2nd spray: 25/11/15 [6-10 am; 3-4 node]
- Hand-boom

Small plot insecticide trial – 2015/16



Sprayed 18th and 25th November

Rained: 9th Dec



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Thrips Small-plot Trial 2015-16

