

Feeding strategies to shift honey bee foraging behavior during cranberry pollination and the impact on colony development

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Problematic

Declines of honey bee colonies population were reported during and after the pollination of cranberry crops

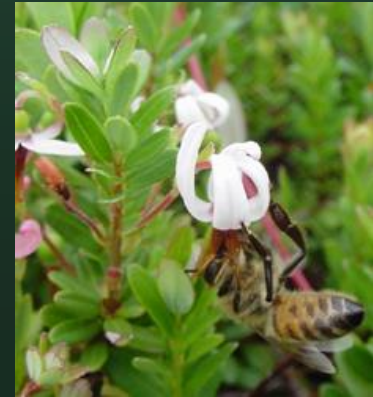


1st Protocol



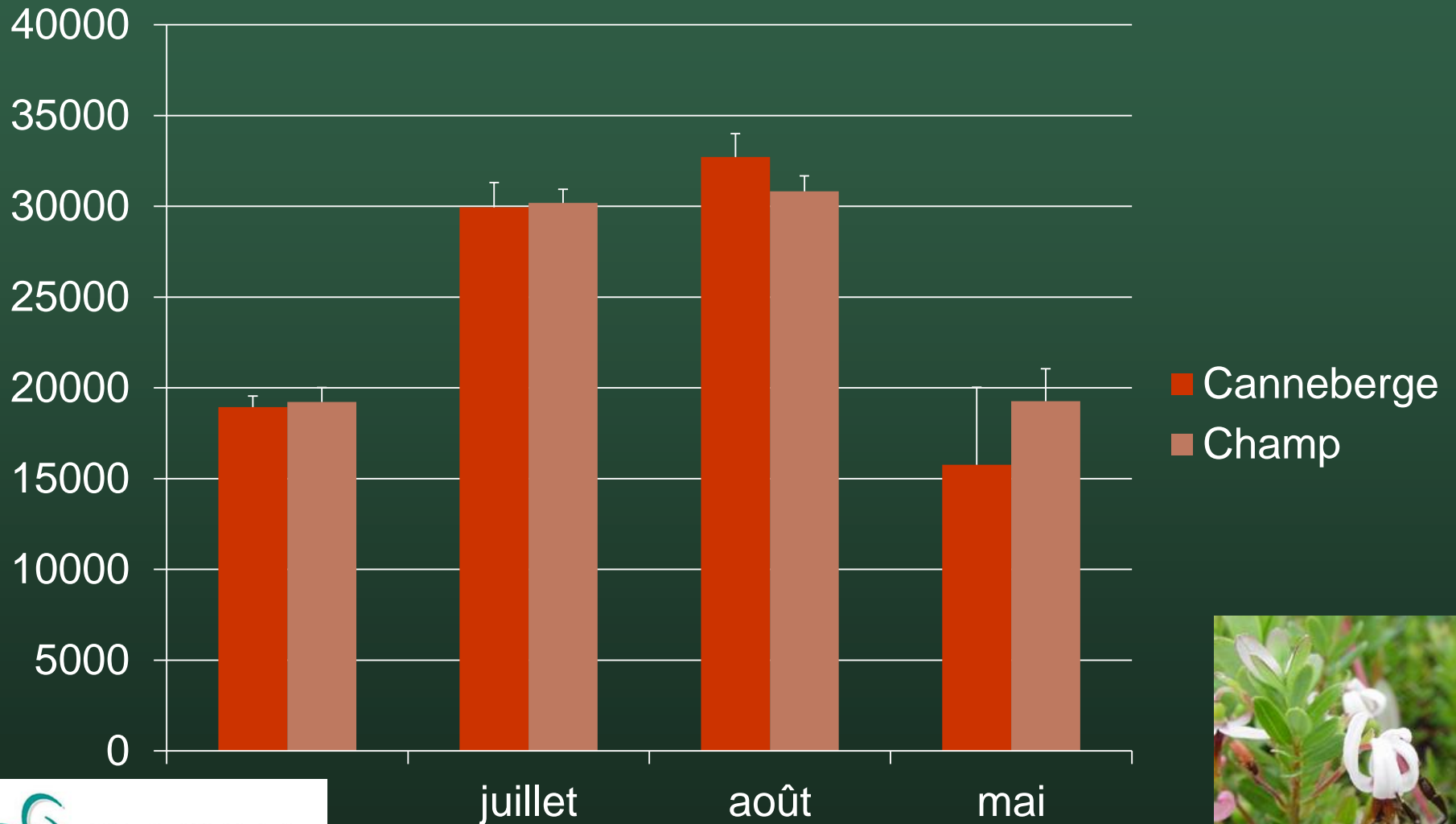
Group 1 (n=9)	Group 2 (n=9)	Group 3 (n=9)	Group 4 (n=9)	Group 5 (n=9)
	Pollination	Pollination 5L syrup 1:1 per week (15L)	Pollination 2,25 kg pollen supplement	Pollination 2,25 kg pollen supplement 5L syrup 1:1 per week (15L)

Results



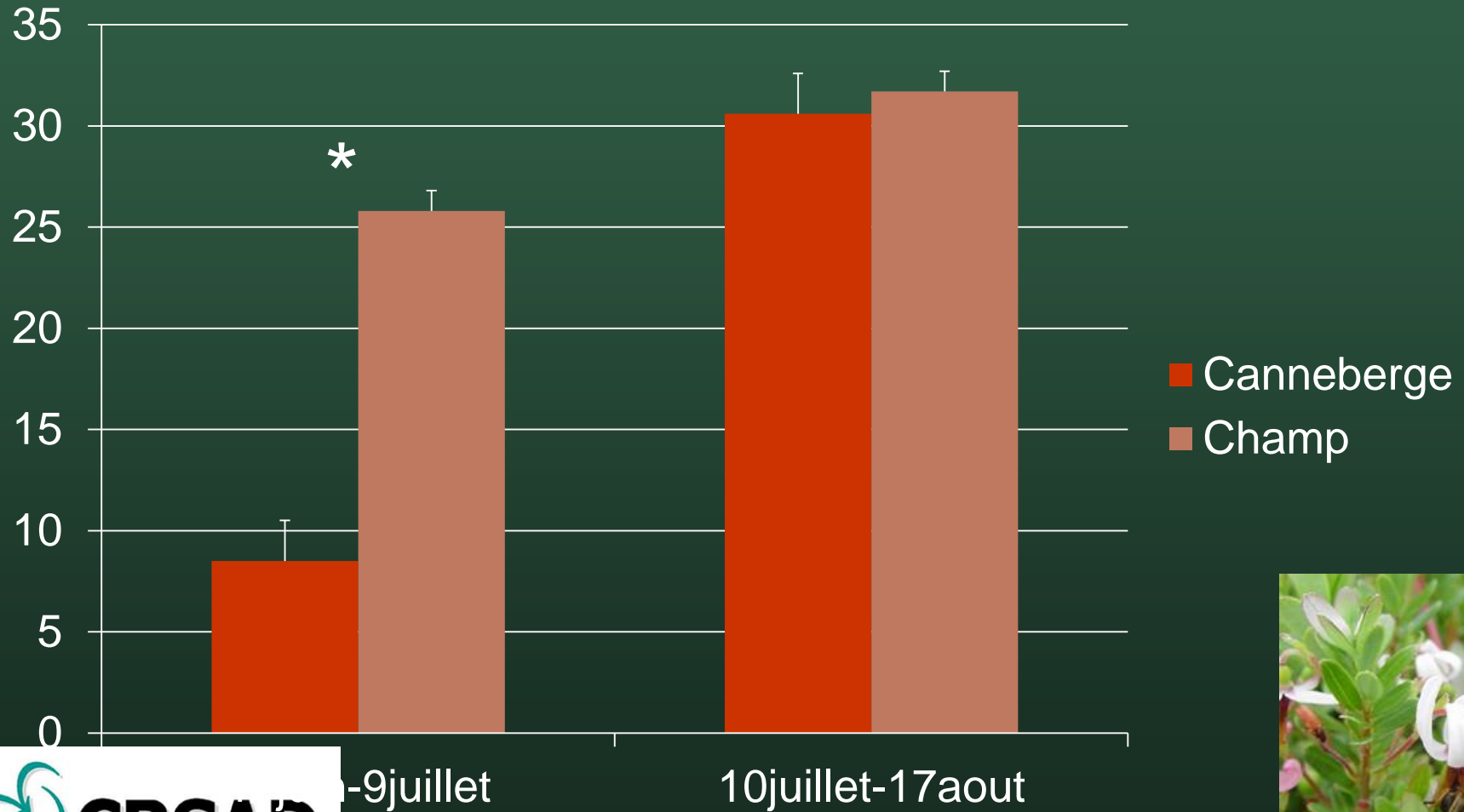
Brood

Nb cells



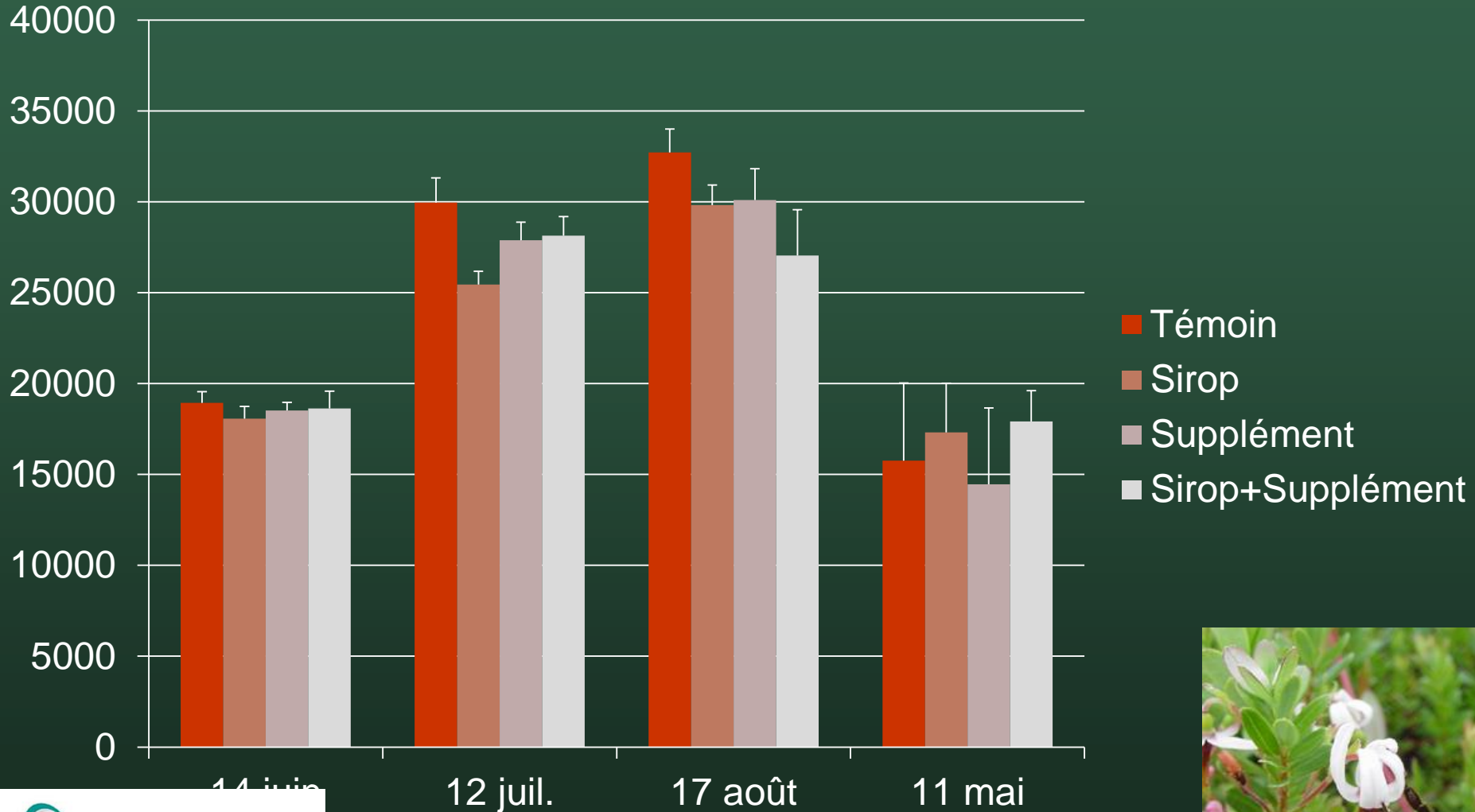
Honey

Honey (kg)



Brood

Nb cells

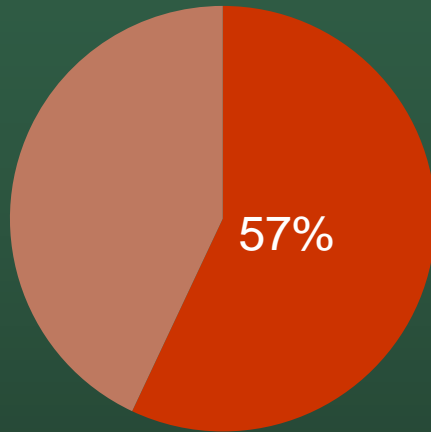


Collecting pollen

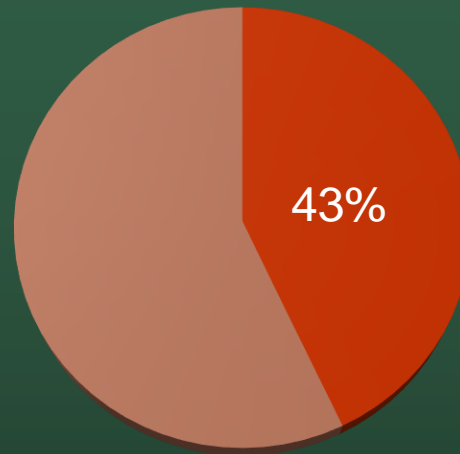


Pollen*

Syrup

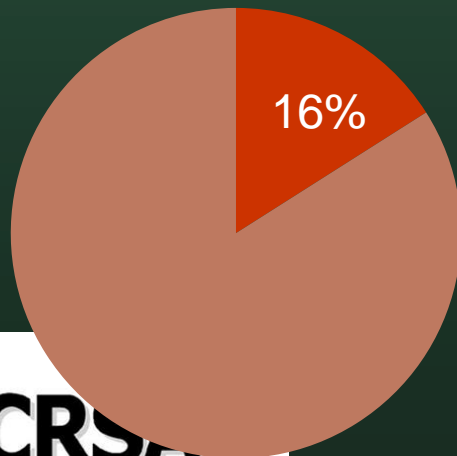


Syrup + Supplement

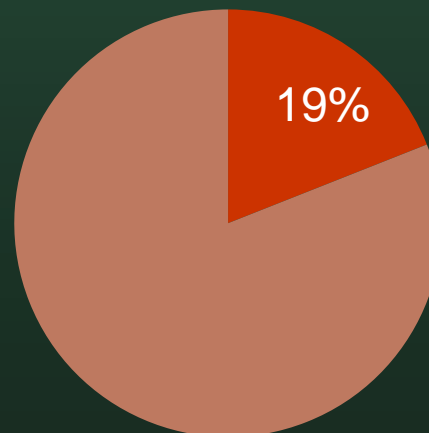


■ cranberry
■ other

Supplement

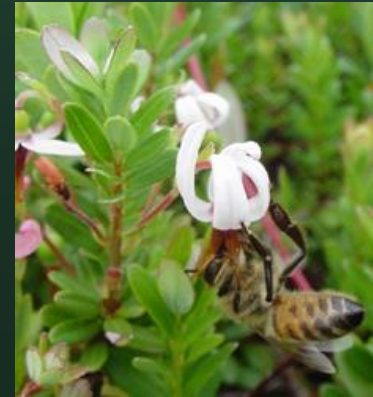


Control





2nd Protocol



Time
↓

Group 1 (n=10)	Group 2 (n=10)	Group 3 (n=10)	Group 4 (n=10)	Group 5 (n=10)
	5L syrup 1:1	15L syrup 1:1	5L syrup 1:1	5L syrup 1:1
			5L syrup 1:1	5L syrup 1:1
				5L syrup 1:1



Brood 2015

Nb cells

30000

25000

20000

15000

10000

5000

0

control

5L

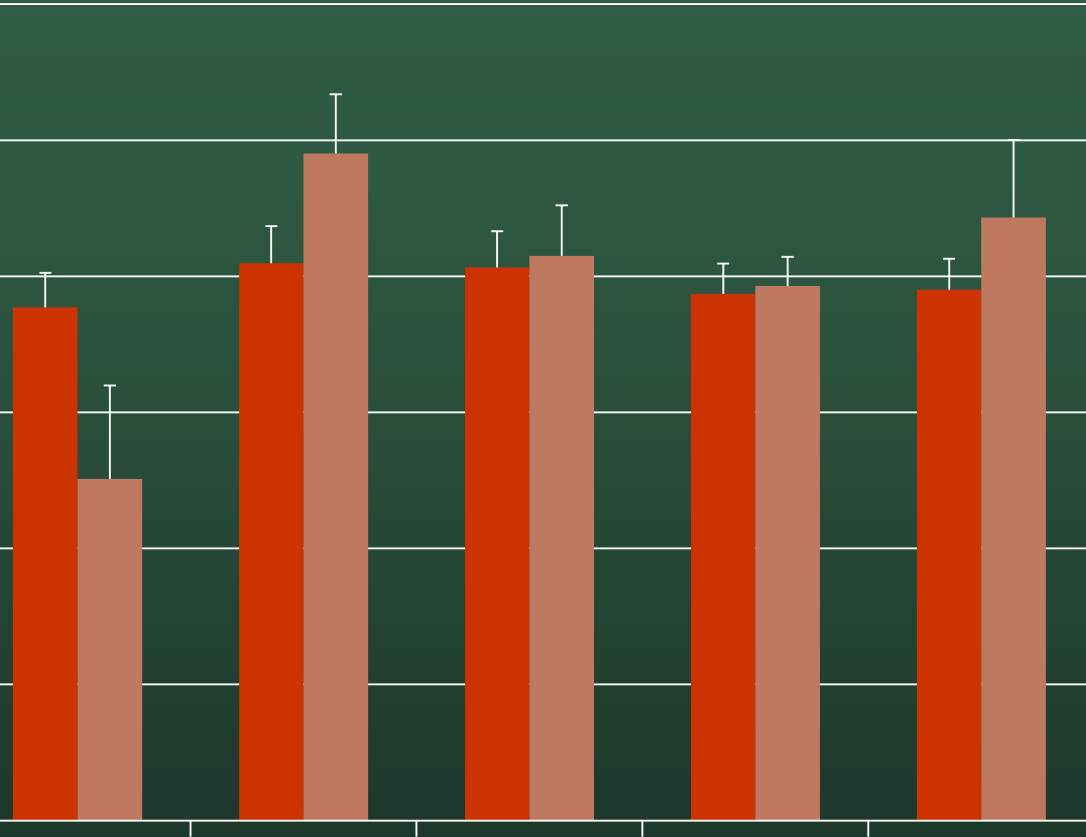
15L

2x5L

3x5L

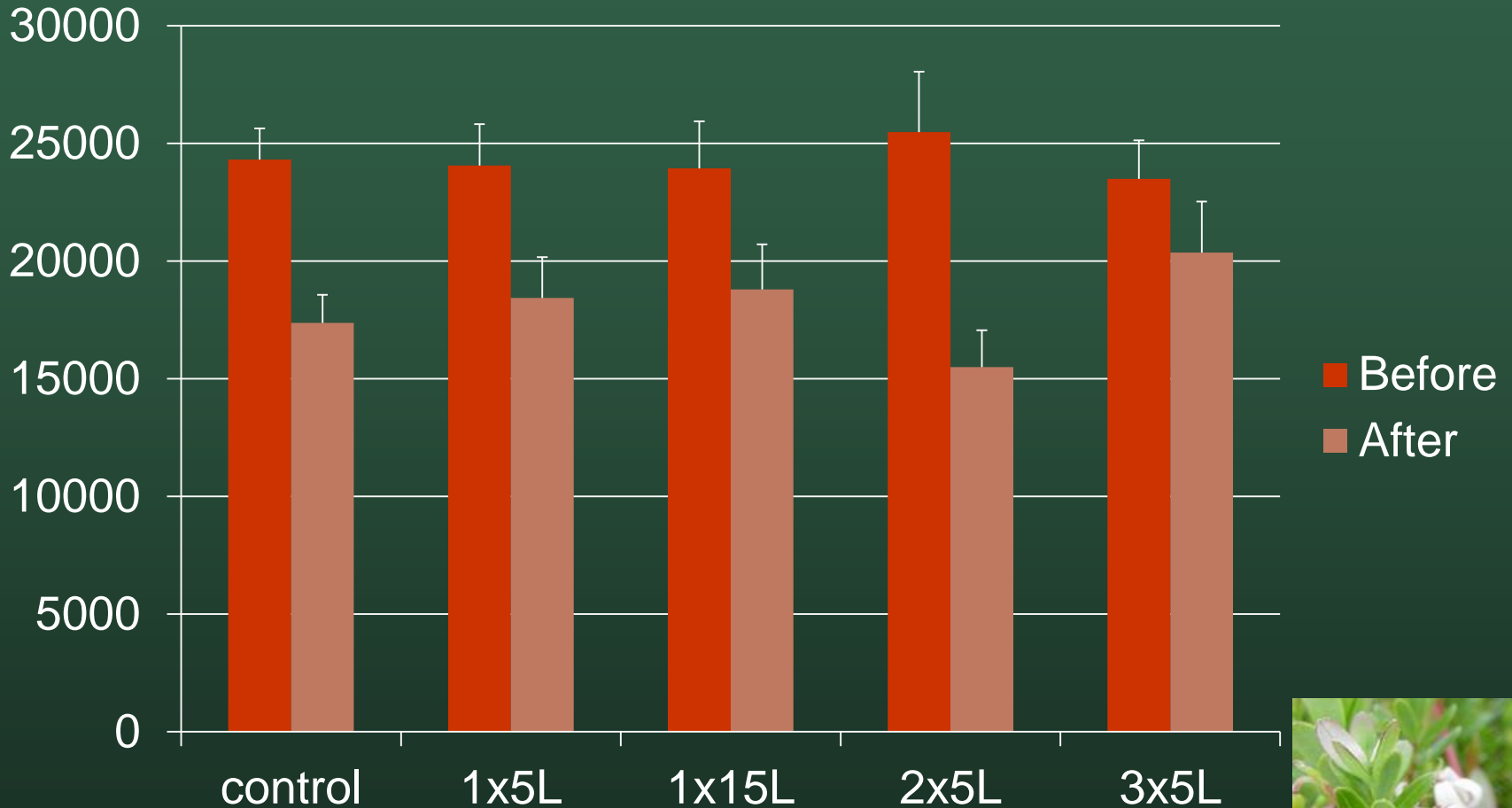
■ Before

■ After

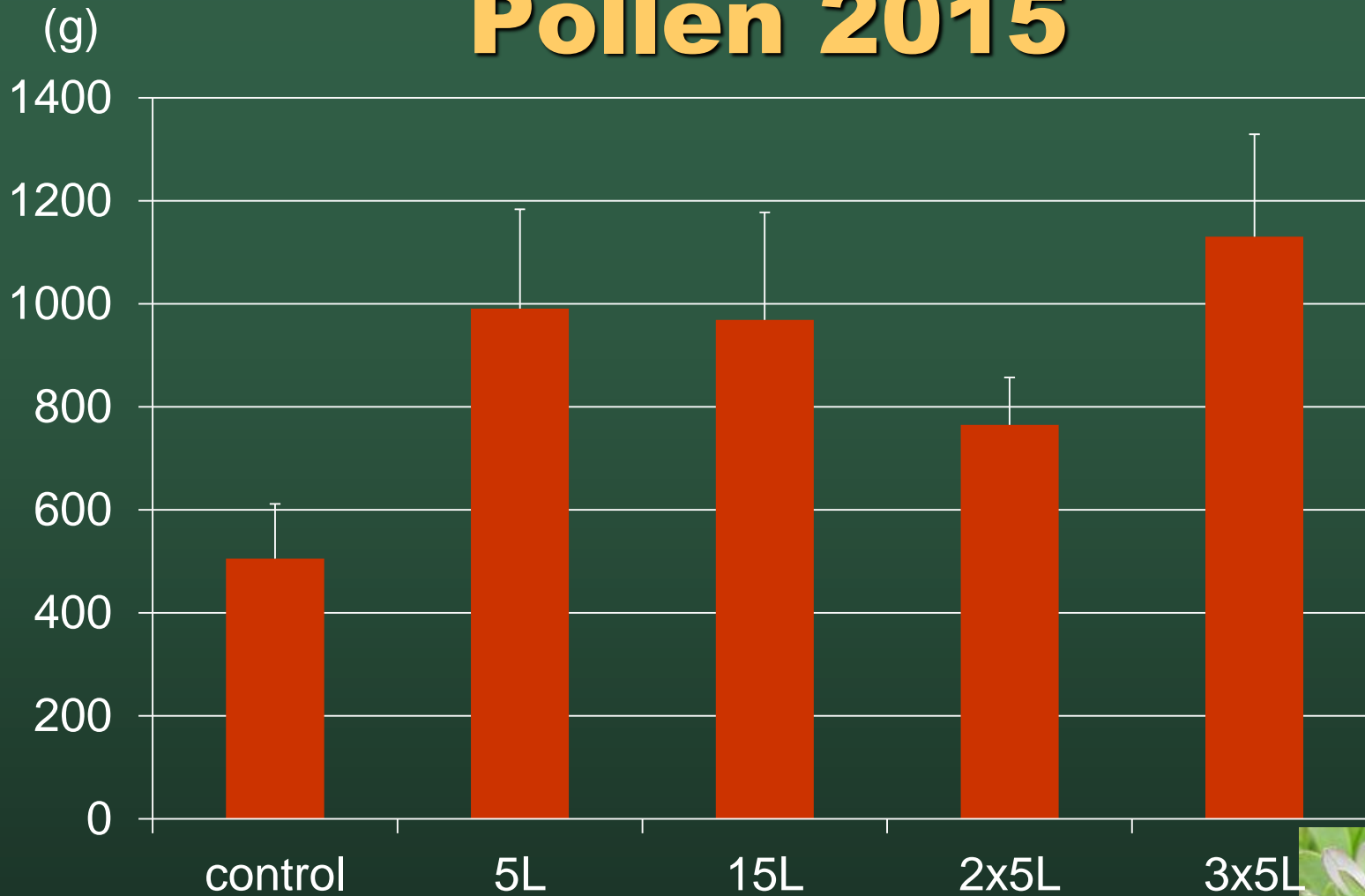


Brood 2016

Nb cells



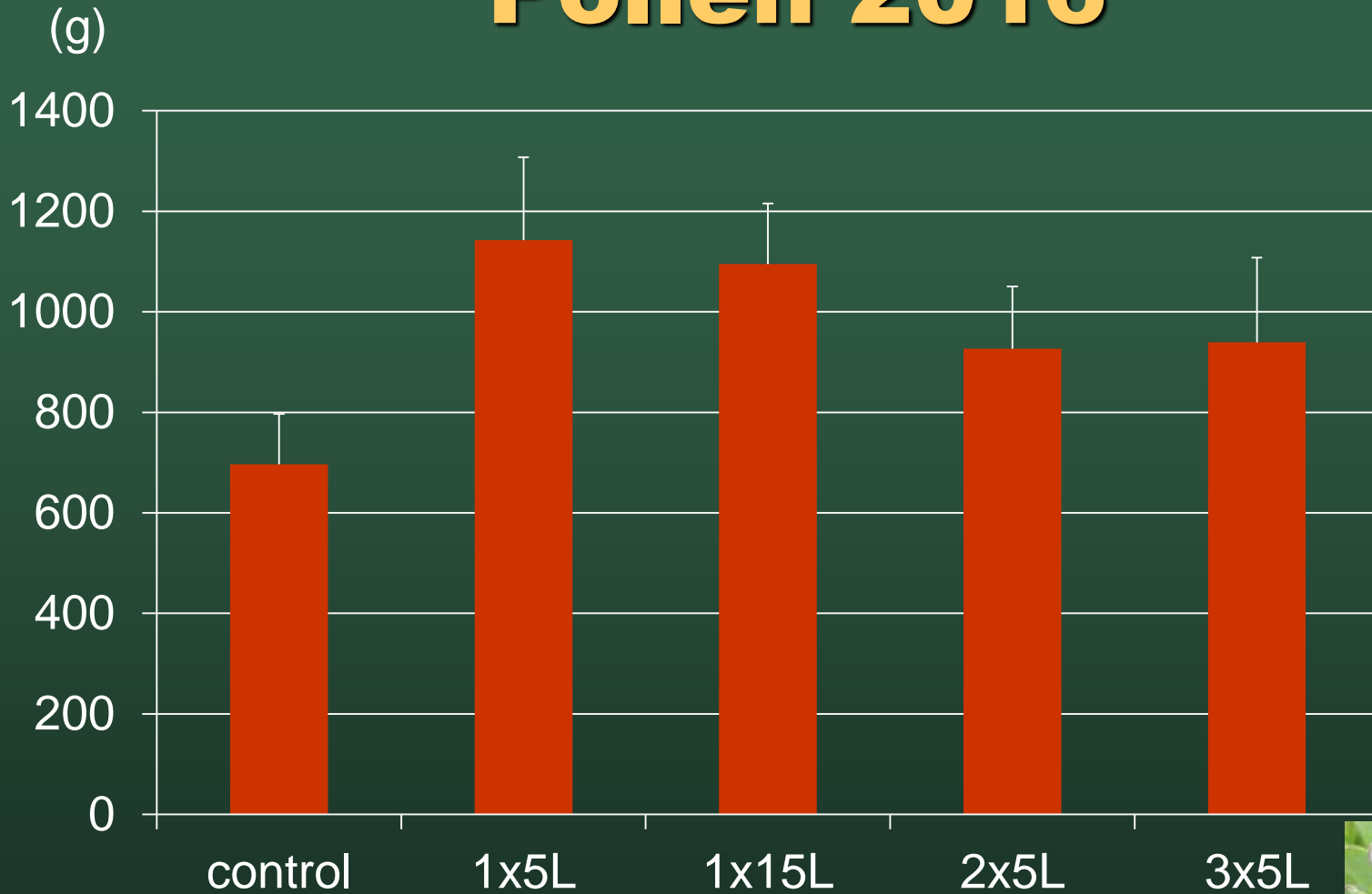
Pollen 2015



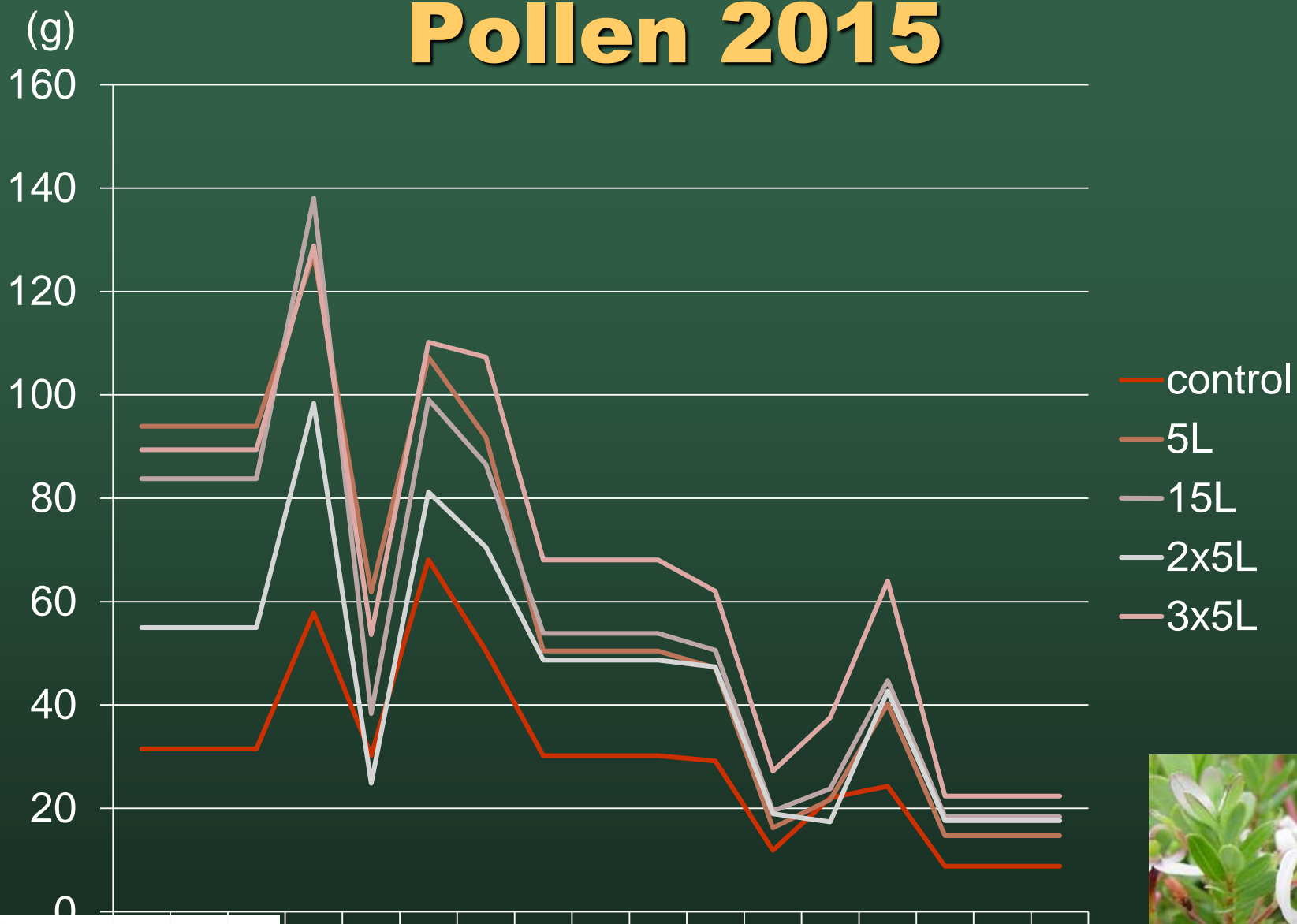
Average of cranberry pollen : 80%



Pollen 2016



Pollen 2015



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Québec 

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