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Nemasys
(BAS 48900I)

Efficacy against grubs

Target Pests: Japanese beetle, chafers, Green June beetle, May/June beetles

Renee J. Keese

December 6, 2016

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DEV-P-2016-US-VC1-A-02.0 on early instar grubs

Objectives:

- Compare Nemasys G, C and R- which has greatest efficacy against grubs in turf? 2) Which application timing provides greatest efficacy?
- Locations: PA, KY, TX

	Treatment	Rate	App Code*	Timing (days)
1	CHECK			
2	Nemasys G (BAS 48900I)	50 M Bio En/100 M2	AB	7-10
3	Nemasys G (BAS 48900I)	100 M Bio En/100M2	AB	7-10
4	Nemasys C (BAS 48700I)	50 M Bio En/100 M2	CD	7-10
5	Nemasys C (BAS 48700I)	100 M Bio En/100M2	CD	7-10
6	Nemasys R (BAS 49300I)	50 M Bio En/100 M2	CD	7-10
7	Nemasys R (BAS 49300I)	100 M Bio En/100M2	CD	7-10
8	Arena 50 WDG (BAS 91524I)	420 gai/ha	E	

*AB – drench, 100 GPA
CD – drench, 200 GPA
E - foliar

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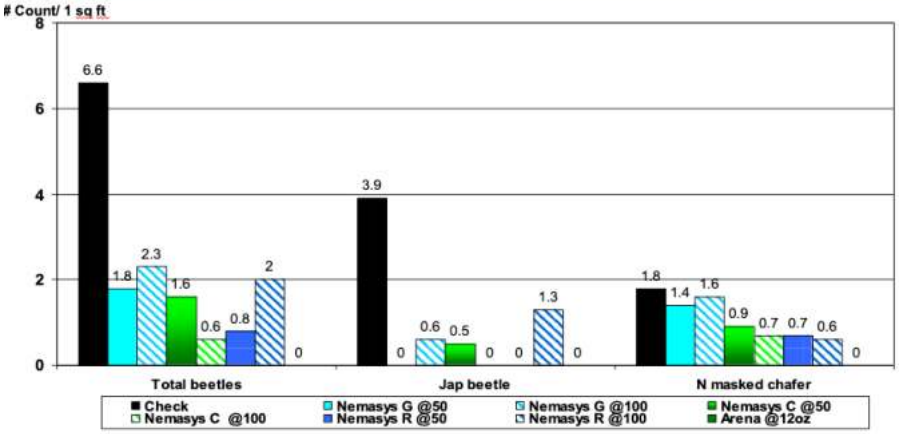
DEV-P-2016-US-VC1-A-02.0-US-UPA-JO1 Nemasys for grub control 26-DAT2

Turfgrass Disease Solutions, Steve McDonald



Applic: 8-4, 8-11

➡ **All treatments reduced numbers of grubs**

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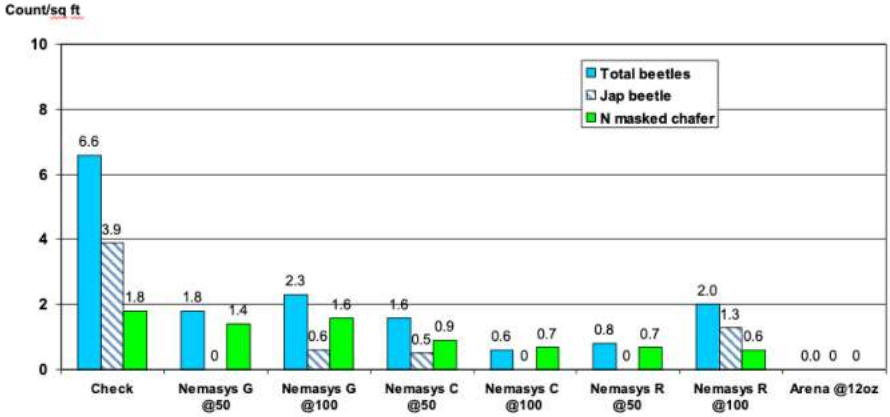
DEV-P-2016-US-VC1-A-02.0-US-UPA-JO1 Nemasys for grub control 26-DAT2

Turfgrass Disease Solutions, Steve McDonald



Applic: 8-4, 8-11

➡ **acceptable control**

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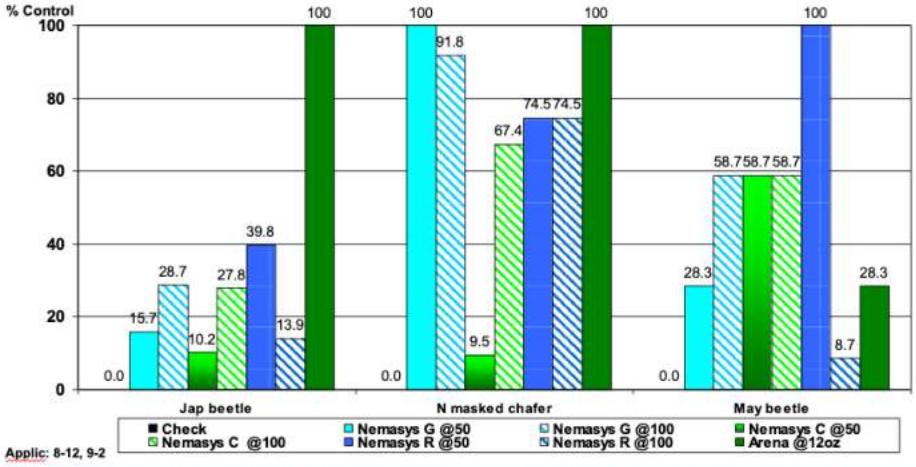
DEV-P-2016-US-VC1-A-02.0-US-UTN-CY1
Nemasys for grub control 45-DAT2
SE Turfgrass Research Center, Mike Harrell



➡ **Differences in formulations, best control of masked chafer. Nemasys G reapplications were delayed several weeks (grubs wrong stage?)**

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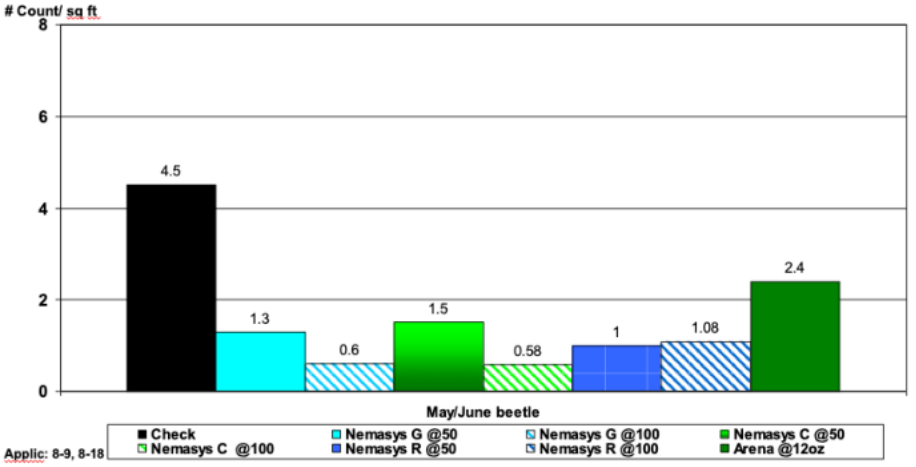
DEV-P-2016-US-VC1-A-02.0-US-UTX-BG2
Nemasys for grub control 29-DAT2
Agricumbia, Peter Bruno



➡ **Differences in formulations, best control of masked chafer**

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Nemasys comparisons grub species – Summary (% Control)

Treatment	Rate m bio en/100m2	PA	PA*	KY	KY	KY	TX*
Grub spp		Japanese	N masked chafer	Japanese	N masked chafer	May beetle	May beetle
DAT		26-DALT	26-DALT	17-DALT	17-DALT	17-DALT	29-DALT
Untreated		0	0	0	0	0	0
Nemasys G	50	100	33	15.7	100	28.3	71
Nemasys G	100	85	22	28.7	91.8	58.7	85
Nemasys C	50	87	50	10.2	9.5	58.7	67
Nemasys C	100	100	61	27.8	67.4	58.7	87
Nemasys R	50	100	61	39.8	74.5	100	78
Nemasys R	100	66	77	13.9	74.5	8.7	76
Arena	12 oz/A	100	100	100	100	28.3	47

*low counts

Nemasys G applied at lower 100GPA volume. Trend for greater control/consistency.

Acceptable >60% control

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Nemasys 2016 conclusions

- Observed grub reductions in all trials (high variability due to low grub counts at some site).
- No consistency across sites – Japanese beetle was controlled well at one site and failed at another. Same with chafers.
- Had hoped grub species would separate out by nematode species, not the case with these few trials.
  - ✓ Several researchers have guaranteed better sites for 2017 if we want to repeat this (more control than external sites)

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