Control of the armyworm, Pseudaletia unipuncta (Haworth), in SW Oregon grass pastures

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August and September of 2005 marked the third year that armyworms defoliated hundreds of acres of grass pasture and field corn in Coos County (and established tall fescue for seed in the mid-Willamette Valley). Populations of over 30 larvae per sq. ft. were recorded (>1,000,000 larvae/A with a biomass of from one to 10 tons!)

Historically, damage in Oregon has been sporadic and localized in grass pastures and seed crops (some silage corn) occurring in the late summer and fall about once every ten to fifteen years. Outbreaks usually followed a mild winter and wet spring. Infestations likely arose from moths migrating north from California in mid-summer. It seems that now AW moths are overwintering in western OR (or close to it!).

In 2004 and 05 hundreds of acres of grass pastures in Myrtle Point, OR, literally disappeared in about a week! Organic milk production in the area has necessitated an OMRI approved control of this pest. The two replicated field trials we conducted in dairy pastures indicate that spinosad can provide effective control of AW.

A 15 day Crisis Exemption for both Entrust® (for organic milk producers) and Success® biological insecticides from Dow Agrosciences was issued by ODA for use on Myrtle Point Dairy Pastures to control AW.

Table I. Site I, Avg AW larvae per 10 straight-line sweeps of standard 15" diameter sweep net

Treatment	Rate/A lb	Live Larvae		
		6 DAT	14 DAT	
Success	.047 ai	1.7a	1.3a	
Success	.094 ai	3.0a	1.3a	
Javelin	1.5 form	20 b	8.3 b	
Javelin	1.0 form	26.7b	15.7 b	
carbaryl	1.0 ai	30.7b	20.7 b	
UTC		25.3b	18.7 b	

Table 2. Site II Reed Canary Grass, Avg. AW larvae/ 10, 90degree sweeps 6 DAT

Treatment/	Rate		
Formulation	lb/acre	Mean	
Success	.047 ai	20.0 a	
Success	.094 ai	19.0 a	
Javelin	1.5 form	107.3b	
Javelin	1.0 form	72.3 bc	
UTC		141.3 bc	

Means followed by the same letter are not significantly different (P=0.05; Tukey LSD)

Tall fescue Armyworm Outbreak Control Trial, Corvallis

Set-up: Sept. 8, 2005 (spray application) Evaluated: Sept. 12 &15 (4 & 7 DAT)

		4 DAT	7 DAT		
Treatment	Rate	Total	Total	Total	Mean
Discipline	3.2 oz	0.00 a	0.00a	0	0.00 a*
Warrior	3.2 oz	3.75ab	3.25ab	13	3.25 a
Warrior	1.6 oz	4.50ab	6.75ab	27	6.75 a
Lorsban 4E	32 oz	.25 a	1.00ab	4	1.00 a
Lorsban 4E	16 oz	.75 a	1.00ab	4	1.00 a
Lorsban 4E	8 oz	8.25bc	6.25bc	25	6.25 a
UTC		19.75c	17.50c	70	17.50 b