Orchard Floor Management in North Coast Organic Pear Orchards

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Objective

In the second year of this project the objective was to determine if the efficacy of several weed control methods, 3 organic herbicides (Acetic acid, BioLink and Matratec), EcoCover (a mulch derived from recycled shredded paper), tree mulch (made from shredded trees) and combinations of these improved after a second year of treatment.

This experiment was conducted in a young non-bearing orchard in Kelseyville, CA.

Spray volume was 70 GPA using

Single 8006E TeeJet nozzle.

Natural Wet at 1%v/v

Note: BioLink replaced GreenMatch in second year of study because Marrone discontinued the sale of GreenMatch due to formulation problems.

Treatments 2012

1. UNTREATED CONTROL

2. Acetic Acid 20% 1-Application April 19th

3. Acetic Acid 20% 2-Applications April 19th June 20

4. Biolink 6% -1 Application April 19th

5. Biolink 6 % -2 Applications April 19th June 20

6. Matran 10% -2 Applications April 19th June 20

7 Ecocover paper mat-alone March 27

8. Ecocover + tree mulch Feb 9, 2011

9. Tree mulch alone Feb 16, 2011

10. Tree mulch + Acidic Acid Feb 16, 2011 April 19th

Tree Mulch +Acetic Acid from Last Year March 6



Tree Mulch March 6





Biolink pre March 6 Green Match 2011



EcoCover March 3





New EcoCover Applied April 27

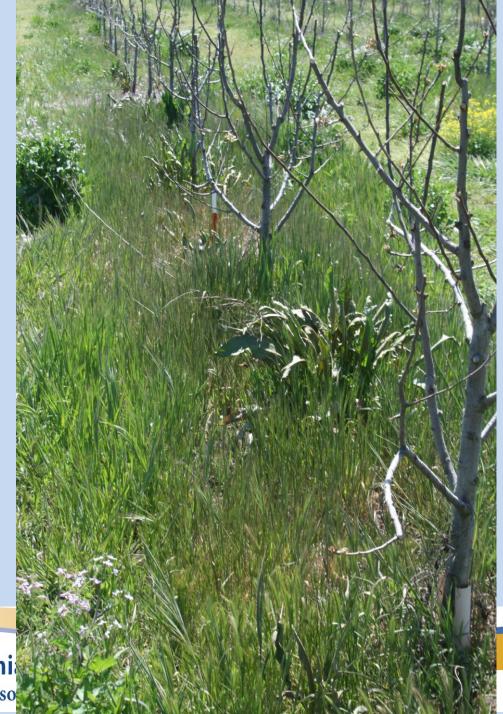


Treatments	Phytotoxicity 4/27/12			
		Broadleaf	Grass	
1. UNTREATED CONTROL		-	-	
2. Acetic Acid 20% 1-Application		4.25	5.5	
3. Acetic Acid 20% 2-Applications		4.5	5	
4. BioLink 6% -1 Application		4.25	4.75	
5 BioLink 6% -2 Applications		4.25	4.5	
6. Matratec 10% -2 Applications		2.75	2.25	
7 EcoCover paper mat-alone		-	-	
8. EcoCover + tree mulch		-	-	
9. Tree mulch alone		-	-	
10. Tree mulch + Acidic Acid(1 App)		3.5	3.5	
Phytotoxicity ratings are based on a 1-10 scale; 1=no damage; 10= complete damage	Control ratings are based on a 1-10 scale; 1=no control; 10= complete control			

Acetic Acid-just after application on April 19



Biolink-just after application on April 19





June 28th –Field Day





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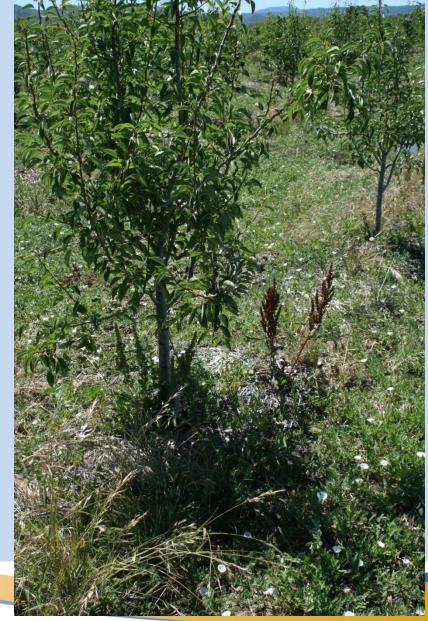


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Treatments		Phytotoxicity 4/27/12		8/13/12	
		Broadleaf	Grass	Control	
1. UNTREATED CONTROL		-	-	2	
2. Acetic Acid 20% 1-Application		4.25	5.5	2.25	
3. Acetic Acid 20% 2-Applications		4.5	5	2.75	
4. BioLink 6% -1 Application		4.25	4.75	2.5	
5 BioLink 6% -2 Applications		4.25	4.5	2.25	
6. Matratec 10% -2 Applications		2.75	2.25	2.75	
7 EcoCover paper mat-alone		-	-	6.5	
8. EcoCover + tree mulch		-	-	3.5	
9. Tree mulch alone		-	-	4.25	
10. Tree mulch + Acidic Acid(1 App)		3.5	3.5	3.75	
Phytotoxicity ratings are based on a 1-10 scale; 1=no damage; 10= complete damage	Control ratings are based on a 1-10 scale; 1=no control; 10= complete control				

