

Pathogen control Carlsbad

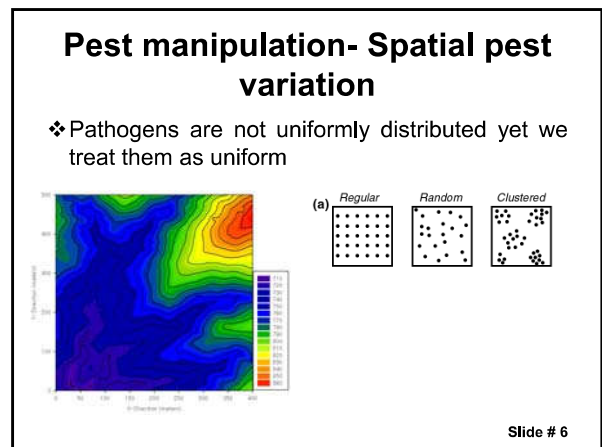
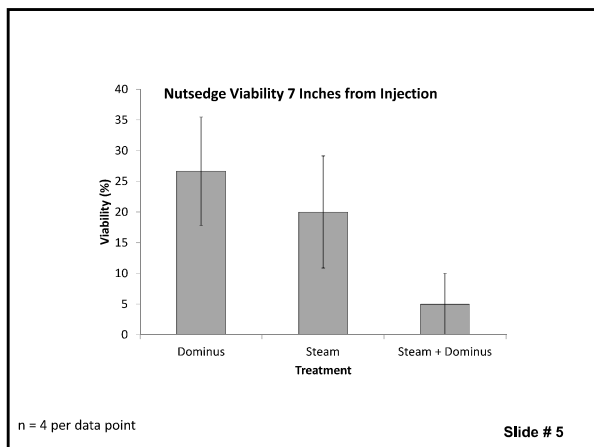
Treatment	Rate	Fusarium (p/g soil)		Pythium (p/g soil)	
		PRE	POST	PRE	POST
MBPic	350 lb/A	183	0	17	0 c
Pic-Clor 60	350 lb/A	1365	0	17	0 c
Dominus	40 GPA	259	47	35	80 a
Dominus/Pic	40 GPA	328	38	28	36 b
TRX-58	500 lb/A	469	201	16	0 c
TRX-58/Pic	400 lb/A	210	74	35	1 c
Nontreated	0	350	721	13	39 b

Jim Gerik, USDA-ARS
Slide # 2

Weed control Carlsbad

Treatment	Rate	Ranunculus	Delphinium	Weed time	
				Weeds (1,000/A)	Hrs. /A
MBPic	350 lb/A	8.3 c	6.6 b	69	e
Pic-Clor 60	350 lb/A	1.6 c	2.6 b	99	cde
Dominus	40 GPA	61.2 a	54.6 a	223	ab
Dominus/Pic	40 GPA	31.7 abc	43.3 a	169	bc
TRX-58	500 lb/A	17.1 bc	1.7 b	87	de
TRX-58/Pic	400 lb/A	27.6 abc	7.0 b	157	bcd
Nontreated	0	52.7 ab	51.5 a	266	a

Slide # 3



THEORETICAL PIC DOSE REQUIRED TO CONTROL A KNOWN PEST POPULATION

Area	Acres (Field %)	Pathogen severity (10=severe, 0= none)	Chloropicrin dose needed (lbs./A)	Chloropicrin used (lbs.)
A	12 (15%)	9	300	3,600
B	24 (30%)	4	100	2,400
C	44 (55%)	0	0	0
TOTAL	80 (100%)			6,000

80 acres receiving 250 lbs./A of Pic = 20,000 lbs. Pic

Slide # 7

Direct-fire Steam Generators



❖ **Advantages**


- ❖ **No steam boiler**
- ❖ **Very efficient**
- ❖ **Water hardness** Johnson Gas Appliance, Cedar Rapids, IA

Slide # 8

EXAMPLE: VIGOR


Organic Ranch (Fuji Rd., Salinas CA) high salt levels in Spring and *Verticillium dahliae* pressure

Non-Treated



September 2015

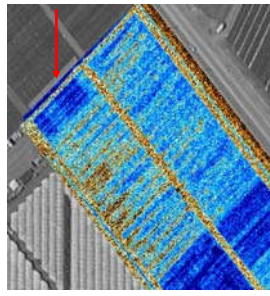
Steam + MSM



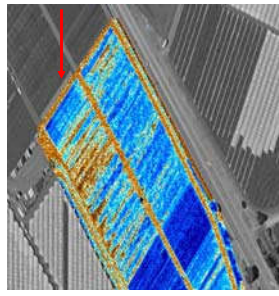
Slide # 9

EXAMPLE: VIGOR

Organic Ranch (TCR, Watsonville, CA): *Macrophomina phaseolina* pressure



May 2015



September 2015

Slide # 10

PROPOSED UC EXTENSION POSITION

- ❖ **At Salinas field station, within 4 hours of most California strawberries**
- ❖ **Possible areas of focus:**
 - ❖ Production research eg. Chilling requirements
 - ❖ Management of organic strawberry
 - ❖ Sustainable small fruit production
 - ❖ Strawberry nursery production, pest management, others
 - ❖ Fumigant research – fruiting fields and nurseries
- ❖ **Form a research cluster with new USDA Salinas hires**
- ❖ **We are asking for your input and support letters**
- ❖ **This is a permanent UC-funded position – To add support:**
 - ❖ http://ucanr.edu/sites/anrstaff/DivisionwidePlanning/2016_Call_for_Position/

Slide # 11