

Garlic Rust Fungicides and Coastal Allium Update

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Rust on garlic

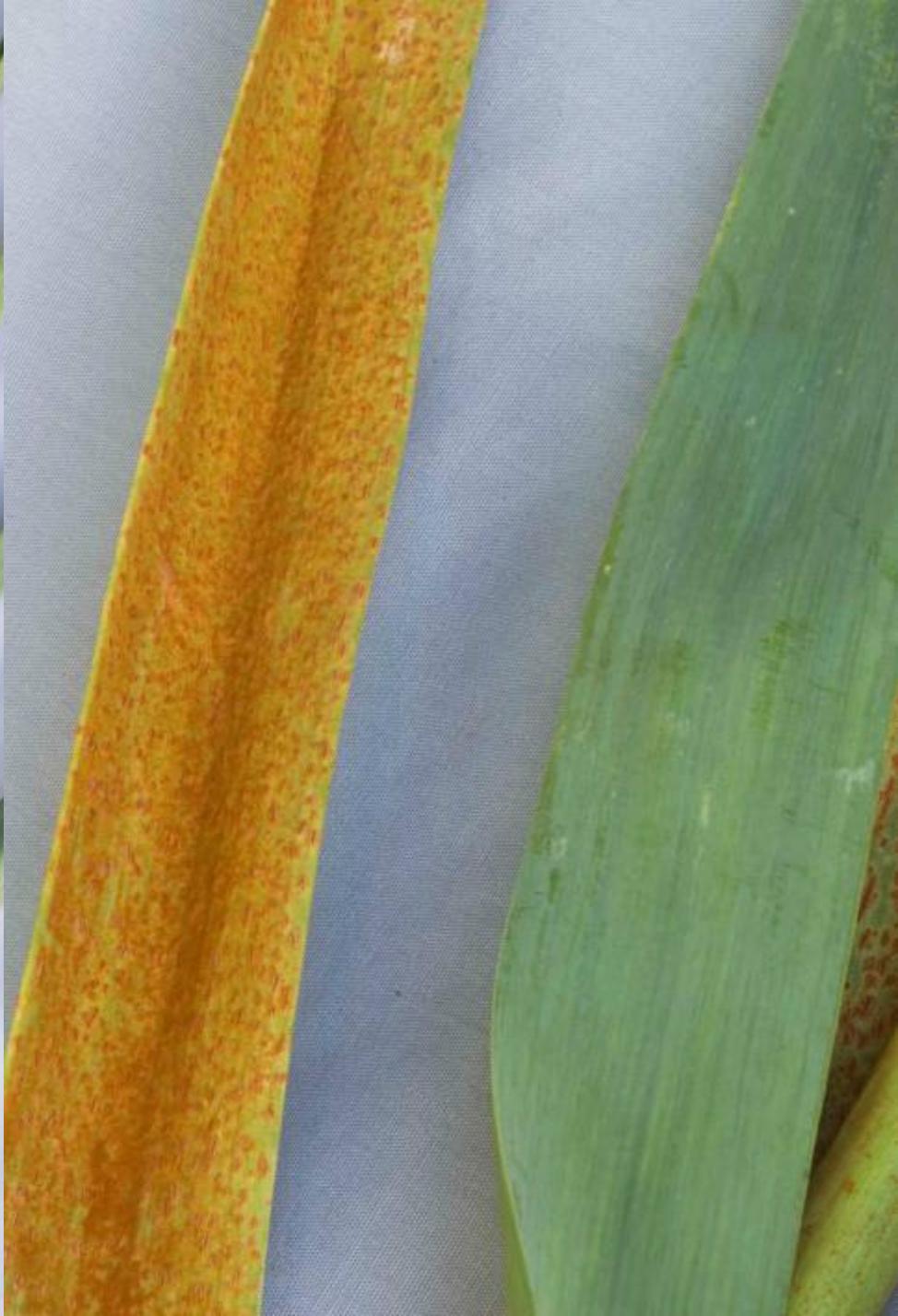


2013 Fungicide trials

- **Quilt / Toledo timing:**
 - **Quadris 12 fl oz. alternate w/ Toledo 6 fl oz**
 - **Start spraying early in March, April, or May**
 - **Spray at intervals of 2 weeks or 3 weeks**
 - **All applied with organic silicate adjuvant**
 - **Grower program: May 9 Quilt; June 6 Quilt + Toledo**
- **Experimentals, new products**
- **Evaluation: disease severity (0=good; 5=bad)**







Set I, leaf 6

4	Quadris/Toledo, 2 wk, Apr start	0.3
6	Quadris/Toledo, 2 wk, May start	0.5
2	Quadris/Toledo, 2 wk, Mar start	0.6
3	Quadris/Toledo, 3 wk, Mar start	0.9
7	Quadris/Toledo, 3 wk, May start	1.0
8	Grower standard	1.0
5	Quadris/Toledo, 3 wk, Apr start	1.5
1	Untreated	3.8
	LSD (P = 0.05)	0.95

Set II, leaf 6

2	Quilt Xcel 21 fl oz	0.1
13	Quash 4 oz	0.4
12	Quash 3 oz	0.8
5	A15457B 10.3 fl oz alt. Quilt 21 fl oz	1.1
4	A15457B 10.3 fl oz	1.2
3	A15457B 6.84 fl oz	1.5
7	Fontelis 1 pt	1.8
8	Fontelis 1.5 pt	1.9
9	Fontelis 1.5 pt alt. Bravo 2 pt	3.0
14	Merivon 4 fl oz	3.2
15	Merivon 5.5 fl oz	3.3
6	Sonata 4 qts	4.5
11	OSO 13 fl oz	4.8
1	Untreated	4.9
10	OSO 6.5 fl oz	5.0
	LSD (P = 0.05)	0.69



Untreated control



Quilt Xcel 21 fl oz



Untreated control



Quash 3 oz



Untreated control



Exp15457 10.3 fl oz



Untreated control



Fontelis 1.5 pt



Untreated control



Sonata 4 qt



Grower standard



Garlic rust management

- **Examine crop for early disease occurrence**
- **Note weather (temperature, leaf wetness)**
- **If rust develops late and weather is dry:**
 - yield loss risk is reduced
 - Start sprays later? Use fewer applications?
- **If rust develops early and weather is wet:**
 - yield loss risk is increased
 - Start sprays earlier? Use more applications?

Acknowledgments

- **Richard Smith (co-PI), Bob Ehn, Mike German, Kat Kammeijer, Trish Love, Mike Mantelli, Elizabeth Mosqueda, Scott Cosseboom, and Steve Moss**
- **California Garlic and Onion Research Advisory Board**
- **Garlic rust task force**
- **Michelle LeStrange**

Coastal Allium Diseases: News

- **Iris yellow spot disease**
 - *Iris yellow spot virus*
 - on onion, leek

- **Fusarium crown rot**
 - *Fusarium avenaceum*
 - on leek



**Iris yellow spot virus
(IYSV)**



**Iris yellow spot virus
(IYSV)**





**Fusarium crown rot:
*Fusarium avenaceum***



**Fusarium crown rot:
*Fusarium avenaceum***

