UC IPM
www.ipm.ucanr.edu

Cotton— Spider Mite, Aphid, and Whitefly Monitoring

Supplement to UC IPM Pest Management Guidelines: Cotton

For Print Use Only

Directions:
1. Beginning at least 50 paces into the field, pick a plant at random and turn over the 5th leaf from the terminal. Examine the underside of the leaf with a hand lens.
2. Count the aphids and record the number and color.
3. Check for presence (+) or absence (-) of spider mites and record on the form.
4. Check for whitefly adults. If 3 or more are present, note the leaf as infested on the form.
5. Note the presence (+) or absence (-) of large whitefly nymphs in the area defined by a leaf disc.
6. Move 20 paces further into the field and select another plant to examine. Repeat the steps above in 4 representative areas of the field for a total of 40 plants.
7. Compute average infestation levels and compare with treatment thresholds.
8. Check field edges for whitefly migration.

Grower_____ Field_____ Date _____

	Aphids		Spider mites	Whitefly		
Plant number	Count	Yellow or Black	(+ or -)	Adults: (+ if 3 or more)	Nymphs: (+ or -)	Natural enemies (Note species)
1						
2						
3						
4						
5						
6						
7						
8						
9						
10						
11						
12						
13						
14						
15						
16						
17						
18						
19						
20						

Cotton—Aphid, Whitefly, and Spider Mite Monitoring (continued)

Plant number	Aphids		Spider mites	Whitefly		Natural enemies (Note species)
	Count	Yellow or Black	(+ or -)	Adults: (+) if 3 or more	Nymphs: (+ or -)	
21						
22						
23						
24						
25						
26						
27						
28						
29						
30						
31						
32						
33						
34						
35						
36						
37						
38						
39						
40						
	Total:		Total:	Total:	Total:	
	Average:		Percent infested:	Percent infested:	Percent infested:	
Treatment threshold:						
	Aphids: First square to open boll: 50-75 aphids per leaf. After open boll: 10-15 small yellow aphids or large black aphids per leaf.		**Spider mites:** 30-50% leaves infested.	**Whitefly:** Adults: 40%. Do not use IGRs if nymphs absent. If no nymphs, but 10 or more adults per leaf, treat field edges only if infestation limited to edges. Nymphs: 40%.		