Crop Conditions:

The season, generally speaking, is off to a good start. Stands look healthy, with the exception of plantings made during the two-week cold spell in late March and early April. Poor conditions lead to some marginally acceptable stands and triggered to a portion of replanting. Cotton looks best if it gained a stand well ahead of cold weather or was planted as rewarming began.

Almost all replanting has been finished and emergence is about complete. The most advanced stands reported last week were at the 5-true-leaf stage and some squaring has started. First irrigation has gotten underway on a very limited basis in the southern valley.

Overall mite pressure is low, though some PCAs are seeing high enough percentages to begin looking ahead to treatments. We were told that a few miticide sprayings were being made in Kern County, but we were unable to reach the PCA involved to confirm that report. Beneficial thrips were holding or suppressing most early mite development, PCAs say.

We will begin our regular degree day charting next week. In its place this week, we show a bar graph of daily degree day accumulations from March 20 to the end of April (see next page). This clearly shows the V-like dip in temperatures during the period.

Mite Report:

James Brazzle, Extension entomology farm advisor, Kern County: "We do have some areas where mites are coming on. We're looking at some cotton south of Greenfield and are probably two to three weeks from treating. That cotton is 4-5" tall. In fields not treated with a systemic, infestations are running 20-25%. Right now, they're reddening the cotyledons and moving up slowly. Thrips are working on them, but mite populations have been increasing slowly, though the cool weather helped slow them some."

Chuck Moran, PCA, Wilbur-Ellis Co., Shafter: "We have traces of mites showing up, even on some fields treated with Temik. In fields that received a systemic, mites are erratic, and the problem could be a plugged shank. We're finding heavy thrip populations associated with the mites. Mites are present on plants that are about the 3-leaf stage."

Steve Lenander, PCA, Technicare, Bakersfield: "Thrips are controlling mites right now, but we'll be spraying some fields in the Metler area south of Bakersfield in the next 10 days."

Sara Savary, PCA, Crop Care Associates, Fresno: "Where we did not have Temik we are finding mites, anywhere from 10% to 30%. Thrips are really coming in strongly everywhere we do find mites. Right now that's holding down pressure. Mites pretty much are localized on cotyledons, with some beginning to move up to the true leaves."

Paul Leonardo, PCA, Agri-Valley Consulting, Merced: "In non-Temik fields, we're finding mites in the 2-4% range. That's all. No hotspots, nothing on field edges. About a third of my growers' fields received Temik."

Steve Wright, Extension farm advisor, Tulare County: "Many growers used Temik or Thymet at planting. In a few areas we're starting to see some spider mite damage and

thrip injury on cotton with first true leaf, but it's localized to the Tipton area and appears to be related to application problems."

Dan Munk, Extension farm advisor, Fresno County: "We're seeing some mites in fields, but it's spotty. Nothing merits treatment."

Bruce Roberts, Extension farm advisor, Kings County: "I saw my first mites of the season today (Friday). They were very, very light."

Degree Day Accumulations

More growers used UC's 5-day degree day forecast this year, and it probably helped them gain surer, healthier stands, says Ron Vargas, Madera County farm advisor and former interim cotton specialist.

"It's a little unbelievable how rapidly people now follow the forecast," says Vargas. "In the last couple of years, they've been shutting down planting when the forecast says conditions are not adequate."

The forecast was widely available this year, too, he notes. Along with being broadcast on TV and radio stations, it was available on UC's IPM site on the World Wide Web. The internet forecast was updated twice daily.

"I was skeptical about how much growers would access the information through the computer," Vargas admits. "But when I started asking at meetings how many producers were on the internet, there was a big show of hands, and people were calling to ask for the (IPM site) address."

As the chart on this page shows, there was a sharp decline in heat unit accumulation, which the forecasts closely predicted. The bars show daily accumulation from the Shafter weather station during the last half of March through April. It was prepared from data supplied by Steve Lenander, a PCA and crop physiologist with Technicare in Bakersfield.

"That cold spell shows up as the V starting in late March," Lenander notes. "Growers who planted before March 27 did pretty well in obtaining a stand, and anyone planting after April 11 probably has a tremendous stand. But cotton planted on or after March 31 was subjected to chilling and has disease pressure."

Lenander says injury and disease are consistent enough that he can tell by looking at a field whether it was planted during that two-week cold stretch.

"We had some really good temperatures this year, but a grower who planted at the wrong time really got his rear end kicked," he says. "We've got stands with 50,000-plus plants in fields planted later and as low as 25,000 plants where weather went against good development. In about 40% of the cotton my growers planted during the cold spell, I advised replanting."

In Lenander's May 1 newsletter to his clients, he advised caution on irrigating to improve below-average stands. "A premature irrigation will cool the soil, which will increase the disease environment and decrease growth," Lenander points out. "The root structure will also be affected in that the roots will tend to grow in a more horizontal fashion rather than the desired vertical formation--this will decrease the plant's ability to

extract irrigation water later in its life. The nutrient availability will also be decreased, especially phosphorous."

Insect Summary:

Aphids were reported by several of our contacts but populations were low and not a threat. "It seems like I'm seeing an aphid here, an aphid there, but nothing alarming," says Manuel Jimenez, Extension staff research associate working in Tulare and Kern Counties.

Ladybird beetles were abundant in most areas and were preying on aphids. Parasitic wasp help also was evident in Fresno County.

Thrip injury was reported in a limited number of fields that did not receive systemic treatments.

Paul Leonardo in Merced County planned to treat cutworms in 300 acres along the San Joaquin River. The land flooded during the winter, which may have something to do with the infestation, he says. "It's the only place I'm finding cutworms," says Leonardo, PCA with Agri-Valley Consulting.

Other News:

Cotton acreage in the Sacramento Valley probably will be in the 8,000- to 10,000-acre range, based on reports reaching Ron Vargas, former interim state cotton specialist. About 5,000 acres were planted last year.

Results were mildly encouraging in '96 for new growers, says Vargas. Yields pushed the 2-bale mark, and some fields hit close to a 3-bale average. There may be less friction between cotton and rice producers because buffer zones have been increased, says Vargas.

Meetings:

*Two Fresno County meetings this Thursday will cover cotton pesticide management strategies. Times and locations: 9 a.m., Westside Research Station; and 1:30 p.m., meeting room at Perez's Labor Camp. Topics include: lygus, aphid and mite management, including resistance management, and effective weed resistance management.

*A whitefly training meeting is scheduled for May 14 at the Kern County Extension Office, 8-11 a.m.