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Science Briefs

Persea mite, thrips threaten avocados

Mark S Hoddle and Karen Jetter

Two tiny pests that recently entered the United States, the persea mite and avocado thrips, pose a formidable threat to California's estimated 6,000 avocado growers, say UC researchers. The mite feeds on leaves, causing them to fall from trees, while feeding thrips damage young fruit, turning them brown.

Mark Hoddle, UC Riverside biological control specialist, and Karen Jetter, UC Davis postdoctoral researcher, have developed an economic model to determine the effects to growers and consumers of the rising production costs, decreasing quality and increased market prices caused by the persea mite and avocado thrips. Initial results show an annual short-run loss to growers of between \$7.6 million and \$13.4 million. Annual short-run losses to consumers from higher prices are estimated between \$6.8 million and \$10.2 million.

Because seasonal avocado imports from countries like Chile and Mexico are rising, the increasing production costs for California growers may not translate into higher prices in the marketplace. Rather, increased imports could replace local production. This could result in a smaller impact on consumers, but an even greater impact on California avocado growers, who produce 90% of the nation's crop. Growers in San Diego County, where nearly half of the state's crop originates, are at greatest risk.