

more rapidly and accurately, as well as methods to prevent natural and intentional food contamination. One area of emphasis will be the development of rapid diagnostic tests for disease-causing microbes such as *Salmonella*, deadly strains of *E. coli*, *Cryptosporidium*, anthrax and foreign foodborne diseases such as "mad cow disease."

### State budget calls for 10% research cut

With a 10% permanent reduction in state financial support for University research, the state's fiscal 2002-03 budget calls for a \$32 million cut in UC's organized research funding (see p. 178). The across-the-board cut was among several targeted reductions specified for the University. Overall, the state is providing \$3.2 billion for UC's operating budget in 2002-03, about 3% less than last year.

The cut in organized research affects programs throughout the University, including those conducted by the Agricultural Experiment Station (AES) at the Berkeley, Davis and Riverside campuses. Also included are AES funds managed through the Office of the Vice President in the Division of Agriculture and Natural Resources (ANR).

The Division's senior administrators expect the impact of this budget reduction to be substantial and long-lasting. "State agencies have been asked to plan for a 20% reduction in funding for 2003-04," says W.R. Gomes, ANR vice president. "The University budget and that of ANR will no doubt sustain further reductions, beyond those taken in 2003-04. The extent of these reductions is unpredictable at this time."

This cut is "relatively harsher" for the Division than it might seem at first blush, notes ANR associate vice president Henry Vaux Jr., because "we have never recovered financially from the severe budget cuts of the early 1990s." Like Gomes, Vaux doesn't expect the fiscal situation to improve soon. "The bottom line is we anticipate that there are going to be even larger cuts next year — and the reserves that helped buffer the impact of this year's cuts are gone," he says.

### UC offers online course for grape pest advisors

Faced with increasingly stringent environmental regulations — including more rigorous state licensing requirements that go into effect Jan. 1, 2003 — pest control advisors (PCAs) for grapes can now obtain important information in a new online course developed by the UC Davis-based Sustainable Agriculture Research and Education Program (SAREP).

"Ecological Pest Management in Grapes" is the first online course of its kind in California, and per-

haps the nation, that is completely Web-based and has undergone scientific peer-review, says Chris Geiger, California Department of Pesticide Regulation (DPR) entomologist. Geiger, formerly of SAREP, created the course with SAREP education coordinator David Chaney, in consultation with an advisory committee of UC scientists and grape PCAs. "As environmental regulations become tighter and older pesticides are removed from the market or heavily restricted, many growers are modifying their production systems to include more ecologically based approaches to controlling pests," Chaney says.

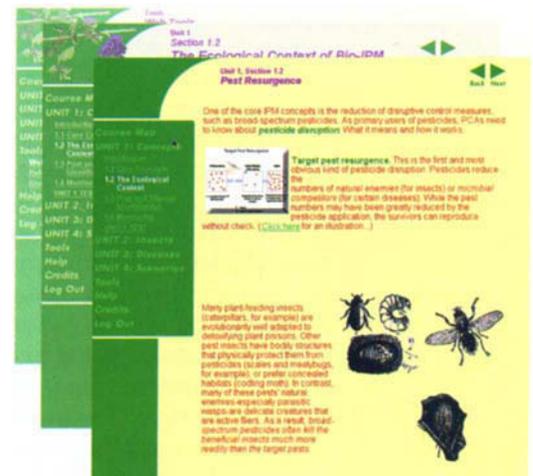
Pest management professionals can play a key role in this transition process, providing clients with information on the biology of pests and natural enemies, sampling programs, decision support tools and knowledge of softer, less disruptive pest control materials.

By making use of up-to-date educational technologies, the self-guided course offers a highly interactive educational experience. It includes inquiry-based, problem-solving simulations, and interactive self-tests.

The course covers the biology of specific organisms in the grape ecosystem, field diagnosis and monitoring techniques and summaries of the best available decision-making tools and management options. Graded multiple-choice exams are taken online, and are used to determine the number of continuing education credits students receive.

The course advisory committee included: Jenny Broome, SAREP associate director; Clifford Ohmart, Lodi-Woodbridge Winegrape Commission; Kent Daane, UC Berkeley Extension assistant specialist; Rhonda Smith, viticulture farm advisor, UCCE Sonoma County; Mary Louise Flint, publications director, UC Integrated Pest Management Program; Larry Whitted, PCA; and George Levitt, viticulture farm advisor, UCCE Madera County. For more information, go to: [www.sarep.ucdavis.edu/courses/grapes](http://www.sarep.ucdavis.edu/courses/grapes).

— Compiled from UC and other news sources



Grape pest advisors have a new educational tool — the first online course that has been peer reviewed by UC scientists. "Because it's on the Web, students can progress at their own pace," says Chris Geiger of the California Department of Pesticide Regulation, who co-developed the program.