

Synar also presented documents indicating that Todhunter and associates held private meetings with members of Florida's citrus growers and vegetable industry. Todhunter at the hearing denied he attended some of the meetings; another, he insisted, had no influence on the agency's decision-making. According to recent interviews with EPA officials, Todhunter also gutted the agency division in charge of handling these types of special pesticide reviews. Although the agency had some 90 pesticides on a roster for reexamination, Todhunter slashed the staff from 128 to about 20.

Time trickled away until last summer when California reported ground water contamination. The discovery was "the straw that broke the camel's back," said Johnson, who is still head of the agency's EDB team. After a 3-year hiatus, the agency set to work on a new set of regulations. In 2 weeks, Johnson and colleagues produced another lengthy report and pushed even harsher rules. Based on additional information, EPA calculated that the cancer risk was an order of magnitude higher than its 1980 estimates.

Again, the citrus industry, farmers, and chemical companies objected and have formally appealed EPA's action on the grounds that there are no good alternatives to the pesticide. USDA, which recently held private meetings with industry, has also intervened. Settling the differences could take another 2 years, but the revelation of EDB-tainted food and heightened public awareness may speed up the process.

EPA has said that several methods show promise as a substitute for EDB fumigation, but they have all been pooh-poohed by the agriculture department. According to EPA, citrus fruit could be treated by irradiation or another procedure that subjects fruit to cold temperatures; for stored grain, other chemicals could be applied. Florida citrus growers protest that without EDB, they will lose the \$25-million grapefruit market in Japan. The Japanese government, however, has accepted citrus fruit treated by the cold storage method "for a long time," says Hisao Azuma, an agriculture official at the Japanese embassy in Washington.

Despite EPA's desire to regulate the pesticide since 1977, efforts at USDA to help farmers and citrus growers develop other methods have been meager, according to a recent study on EDB by the General Accounting Office. In a briefing submitted last spring to Representative George Brown, Jr. (D-Calif.), chairman of the Agriculture Committee's subcom-

mittee on research, the General Accounting Office said studies by USDA have "been limited to short-term research projects. . . . This crisis-oriented research resulted in the postponement of broader-scoped, long-term research." It noted that since 1977, it has twice advised USDA to develop an agency-wide plan for research and development, but to no avail. An EPA official recently put it this way, "Without an all-out cancellation industry wouldn't consider alternatives. Now we're canceling and they're screaming there are no alternatives."

The General Accounting Office also faulted EPA's regulatory process. It cited several problems, concluding that the agency has "emphasized starting, but not completing the process, planned poorly, [and] not resolved several important policy and procedural issues. . . ."

One interesting fact in EDB's regulatory history is that the House Agriculture Committee, which has jurisdiction over pesticide use, has yet to examine the problems with the pesticide and EPA's role. Despite the strong criticisms by the General Accounting Office, Brown did not pursue the matter with his usual keen interest in pesticide problems. Some sources allege that other committee members told Brown to lay off EDB because of its wide importance to their constituents, but Brown denies this. Nevertheless, Synar and other legislators are going after the topic. Senator Dave Durenberger (R-Minn.), chairman of the oversight subcommittee of the Environment and Public Works Committee, will hold an EDB hearing on 27 January.

EPA is now pondering what to do next. On the issue of citrus fumigation, Edwin Johnson, head of EPA's Office of Pesticide Programs, says that the agency may choose a tolerance standard "at the lowest level we can set and still fumigate effectively." With grain products, Richard Johnson believes that Florida's cut-off point of 1 ppb is probably too harsh. Although he had hoped that EDB's use as a grain and citrus fumigant would have ended last summer, Johnson says 1 ppb standard would be too disruptive to the nation's economy and its food supply. "We are not dealing with a crisis [to health]," he said. Noting that the agency has already taken 7 years to achieve any substantive regulation of EDB, "Another year is not going to make that much difference." Meanwhile, the special review process at EPA has not been overhauled, its staff has not been reconstituted, and the list of pesticides slated for reevaluation continues to grow.

—MARJORIE SUN

University of California Sees Budget Turnaround

A rise in state revenues has prompted California Governor George Deukmejian to propose an increase in the public higher education budget that would bolster the sagging fortunes of the University of California (UC). With the state now running a surplus in its budget, Deukmejian is asking for a total of nearly \$1.5 billion for 1984–1985 in state funding for the nine-campus university, representing a \$241 million, 20 percent increase over this year. Some \$113.7 million of the increase would go to raise salaries a total of 13 percent during the period.

UC President David P. Gardner warmly welcomed the governor's initiative, saying that "If approved by the legislature, the Governor's budget will be a major turning point in the University's history. The budget does more than just hold the line; it reverses a long period of deterioration that we have been experiencing."

The university has undergone a 16-year siege of tight finances under the administrations of Governors Ronald Reagan and Jerry Brown, each of whom served two 4-year terms in office; both departed from the relatively indulgent fiscal treatment of the universities practiced by earlier governors. In recent years, inflation and the effects of Proposition 13, which restricted the growth of local tax revenues, put added pressure on funding for higher education.

As a result, UC faculty salaries had declined relative to those of faculty in the leading public and private universities to which UC is generally compared. The university's building program was sharply restricted, the UC plant showed the effects of a long stretch of deferred maintenance, and the university program suffered from obsolete equipment and shortages of supplies.

The system's Berkeley campus, the UC flagship campus and a perennial among the leaders in national ratings of universities, had maintained its standing in recent surveys. However, partisans of the university had noted the departure of some able faculty for higher salaries elsewhere and warned that the university's academic distinction was threatened. The slippage in

UC's position in the academic marketplace has been emphasized and Gardner and others had made improvement of faculty salaries a top priority.

The proposed 13 percent salary increase for faculty would be paid in installments of 4 percent on 1 June and 9 percent on 1 January 1985. University sources say that the raise will restore UC salaries to the average levels projected for eight peer institutions on which the salary comparisons were based. These included Harvard and Stanford among the private universities and Wisconsin and the State University of New York among the public.

The \$241-million budget increase earmarks some \$44 million for improvements to include funds for instructional equipment and computers and a \$2.3-million boost in state funds for research. In addition to the \$241-million boost in operating funds, the governor asked for \$155.8 million for the university's building program. Some \$42.4 million would be made available in the current year.

Elected in 1982, Deukmejian took office with the state deficit at \$1.5 billion and the California economy reeling. As a candidate he had pledged not to raise taxes and as governor has kept a tight rein on spending. His liberal treatment of higher education is not repeated in other sectors of the budget and he has been at odds with Democrats in the legislature about budget policy. Sources in the legislature, however, say that his plans for university funding are regarded favorably by many Democrats and should have bipartisan support.—**JOHN WALSH**

Bamboo Loss Endangers Giant Pandas in China

The peculiar life cycles of mountainous stands of bamboo in the People's Republic of China is threatening the survival of roughly one quarter of the estimated 1000 giant pandas living there. Bamboo, the panda's primary food source, is currently dying off throughout the animal's habitat. So far only two pandas are known to have died of starvation, but the height of the crisis is not expected until later this

year and will not correct itself naturally for the next 3 to 5 years, says George Schaller, director of the animal research and conservation center of the New York Zoological Society and leader of World Wildlife Fund's (WWF) Project Panda. Schaller recently visited the United States briefly before returning to China.

WWF and China formulated a joint agreement 5 years ago to protect China's wildlife, with the panda project being the first specific undertaking. The pandas' problems arise because of two main forces. The first is the expansion of the Chinese human pop-



ulation into the pandas' shrinking habitat, particularly the encroachment of farms that have reduced native stands of bamboo, which is virtually the sole source of food for the animals. The second has to do with much of the remaining bamboo synchronously entering the regenerative phase of its 40- to 50-year life cycle. That bamboo is beginning to flower, form seeds, and then die off—to be replaced by seedlings that will take several years to grow enough to support pandas.

Not much can be done to replenish the bamboo supplies in the short run. However, the Chinese government is taking several measures to help the animals. Emergency holding stations to rehabilitate starving animals are being established; county rescue teams will roam the outback to locate animals in trouble and pack them out in portable cages, if necessary; and a massive propaganda campaign for volunteers to contribute funds or report the whereabouts of starving pandas is being mounted. The government also has arranged for 1500 people to move from one area designated

a preserve, whose slopes will be planted over with bamboo and become a permanent refuge for the giant panda.—**JEFFREY L. FOX**

New Entry Among Patrons of Medical Research

Although not yet off and running, a new foundation created last year is expected to be among the major private sources of funding for biomedical research. The new foundation, the Lucille P. Markey Charitable Trust, is named for its founder, who established it and defined its purposes in her will. Mrs. Markey, who died in 1982, oversaw the highly successful Calumet thoroughbred breeding and racing stables in Kentucky after the death in 1950 of her husband, Warren Wright, the stables' founder.

By concentrating on basic medical research, the new foundation will move into a sector from which private foundations largely withdrew when federal funding of biomedical research increased in the decades after World War II. The Markey trust will also depart from common foundation practice by disbursing its assets over 15 years, a strategy that should give it substantial impact in its field.

No estimate of the total worth of assets destined for the trust can be made until it receives the residue of the Markey estate, which is still being settled. Sources familiar with the situation, however, say that the trust will take its place among major private foundations with assets in the low hundreds of millions.

The program for the foundation is still in the early formative stage. The trustees announced in November the appointment as medical director of Robert J. Glaser, a former dean of the Stanford medical school who retired from the presidency of the Kaiser Family Foundation when he took the new post. Glaser will assume primary responsibility for designing the research program to achieve objectives set in the Markey will. Trust officials say it will be a year or more before funding and program matters are settled and research proposals can be considered. After that, the foundation is expected to be fast out of the gate.—**JOHN WALSH**