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**COVER** The thermogenic inflorescence of *Sauromatum guttatum* Schott, voodoo lily (right) and its thermographic image (left) on the day of flowering. Each 1°C difference in surface temperature corresponds to a different color. The appendix, upper cylindrical part of the inflorescence, is about 9°C warmer than the rest of the plant. This heating is triggered by salicylic acid which moves into the appendix 1 day before inflorescence unfolding. The heat is used to volatilize putrid-smelling compounds attractive to insect pollinators. See page 1601. [M. E. Nuttall, Photo Services, Du Pont Experimental Station, Wilmington, DE 19898]

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## California's Proposition 65

**I**mpending implementation of the recently enacted California law entitled Safe Drinking Water and Toxic Enforcement Act of 1986 is causing concern among a substantial fraction of companies doing business in California. The groups affected include grocery manufacturers, producers of alcoholic beverages, the chemical industry, and restaurants. Anxiety is mounting because part of the law will become effective 1 March 1988, and there is uncertainty about what must be done to comply with it. Beyond that, the law contains a "bounty hunter" clause that is likely to lead to an enormous amount of litigation. Individuals can file suits against alleged violators of the law and share 25 percent of any fines. It costs only a few hundred dollars to file a suit. Defending against one may involve millions of dollars.

The new law has two major parts—one dealing with drinking water, the other requiring a warning before exposure to chemicals known to cause cancer or reproductive toxicity. It is the second part that becomes applicable on 1 March. This part of the law states, "No person in the course of doing business shall knowingly and intentionally expose any individual to a chemical known to the state to cause cancer or reproductive toxicity without first giving clear and reasonable warning to such individual. . . ."

The Grocery Manufacturers of America pointed out that virtually all food naturally contains arsenic and other trace elements known to be carcinogenic. Thus they estimate that 15,000 items on a supermarket's shelves may have to be identified as carcinogenic. The law does provide an exemption: "An exposure for which the person responsible can show that the exposure poses no significant risk assuming lifetime exposure at the level in question for substances known to the state to cause cancer, and that the exposure will have no observable effect assuming exposure at one thousand (1000) times the level in question for substances known to the state to cause reproductive toxicity. . . . [T]he burden of proof that an exposure meets the criteria of this subdivision shall be on the defendant."

The proviso about reproductive toxicity has the effect of requiring the labeling of common table salt as a reproductive toxic agent. The same is true of beer or wine. Ultimately when more tests have been performed on other substances that are ingested, most of them too are likely to be deemed toxic if the reproduction criteria of the law are applied.

Ultimately, roasted or broiled food will be added to the list of toxics, for they contain carcinogens. Thus the law will then require that those who dine out be informed that the wine is a carcinogen and a reproductive hazard, and when served their food, they will be told that their charbroiled steak is also carcinogenic. Such warnings will scarcely promote a romantic atmosphere or increased dining out.

Labeling a large number of items as carcinogens because they contain parts per billion of something of doubtful carcinogenicity will not enable the public to act more judiciously in safeguarding health. In fact, the opposite may be true. Milton Russell, who until recently was assistant administrator for Policy Planning and Evaluation at the Environmental Protection Agency has made the following comments in a different but similar context:

Real people are suffering and dying because they don't know when to worry, and when to calm down. They don't know when to demand action to reduce risk and when to relax, because health risks are trivial or simply not there. I see a nation on worry overload. One reaction is free floating anxiety. Another is defensive indifference. If everything causes cancer, why stop smoking, wear seat belts or do something about radon in the home? Anxiety and stress are public health hazards in themselves. When the worry is focused on phantom or insignificant risks it diverts personal attention from risks that can be reduced.

As time passes, many substances will be added to the state's list of carcinogens and reproductive toxins. Twenty months after they appear on the compilation, they will also be controlled by the drinking water part of the law. As a result, use of some agricultural chemicals is likely to be proscribed. Were Californians to find parts of the law irksome, it would not be easily changed. Modifying a California law that has been enacted by the initiative and referendum process is difficult and unlikely to be done soon.

—PHILIP H. ABELSON