Letters

Boll Weevil Eradication

As an entomologist, I thoroughly enjoyed Luther J. Carter's balanced and lucid discussion of boll weevil eradication (News and Comment, 8 Feb., p. 494). The lack of bias in an article discussing Southern politics, in-hive entomological bickering, bureaucratic gamesmanship, and environmental pollution is especially commendable. However, despite the report's overall excellence, several points require elaboration. One of these is the extent to which organophosphate insecticides were used on cotton prior to the 1972 DDT ban. As early as 1964, 15 million pounds of organophosphates (predominantly ethyl and methyl parathion) were applied to 10 million acres of cotton (*1*). Thus, nearly a decade before the DDT ban, cotton was already under a heavy blanket of dangerous substitute insecticides.

The matter of insecticide impact on entomophagous insects also needs clarification. While it is true that DDT was less destructive to the natural enemies of cotton pests than certain of the organophosphates, it lost its advantage when combined with toxaphene in a potent mixture that was in vogue at the time of DDT's demise (*2*).

Finally, in an apparent ploy to gain political and administrative support for the program, the eradicators label it "integrated control." Here they play on the fact that the objective of eradication requires a variety of techniques to batter the weevil population down to levels which permit it to be overflooded with sterile males. But eradication remains the program's single objective and this is where the integrated control premise collapses.

The main suppressive tools to be used in the program are insecticides. This means that, until eradication is attained, vast acreages will be intensively sprayed. However, some of our best entomologists say that, with existing technology, eradication is impossible. In this they are supported by the record, for in all entomological history no broadly adapted insect, widely established over diverse terrain, has been eradicated through human effort. Insect populations that have been eliminated (for example, those of the khapra beetle, the Mediterranean fruitfly, the mosquito *Anopheles gambiae*, and the screwworm) all had readily exploitable weaknesses. The boll weevil does not. What its "eradication" promises, then, is immensely costly environmental pollution conducted under the guise of integrated control.

In entomology, the old political game of pork-barreling seems to have a new name—"boll weeviling."

ROBERT VAN DEN BOSCH
Division of Biological Control,
College of Agricultural Sciences,
University of California, Berkeley,
1050 San Pablo Avenue,
Albany 94706

References

1. *U.S. Dep. Agric. Econ. Res. Serv. (Rep.) No. 131* (1968).
2. V. M. Stern, R. van den Bosch, H. T. Reynolds, *J. Econ. Entomol.* **53**, 67 (1960).

Cigarette Advertising

The strongly adverse relation between cigarette smoking and health led to the banning of cigarette advertising on television. Since television advertising of cigarettes was discontinued, sales have not been noticeably affected. With the awareness that the money previously spent on television advertising was seemingly wasted, it is not immediately obvious why the tobacco industry continues to advertise at all. Knowing the intensity of addiction experienced by most smokers, it is probably not necessary to convince them they should smoke. Indeed, most regular smokers find it very difficult not to smoke and certainly don't need encouragement to continue. Yet, the tobacco industry continues to advertise heavily.

If the money spent on television advertising was useless, why continue the same practice in the printed media? What is the tobacco industry getting in return for their investment? One return is the promotion of the notion that smoking cigarettes is a matter of user's choice and not an uncontrollable addiction. A more disquieting possibility is that this investment serves as hush money, softening the telling of how bad the story of smoking versus health really is.

WILLIAM H. OLDENDORF
Department of Neurology,
School of Medicine,
Center for the Health Sciences,
University of California,
Los Angeles 90024

Medical Research Funding

Investigators who have witnessed the progressive downgrading of funding of medical research and the trend toward replacement of scientists by politically appointed lay managers in policy-making roles during the Nixon Administration might take heart upon reading the following statement:

> Scientific activity cannot be turned on and off like a faucet. The withdrawal of support disperses highly trained research teams, closes vital facilities, loses spinoff benefits, and disrupts development momentum. The current [Johnson] administration has even struck at the lifeline of our future progress—science education. . . . Especially hard hit in the reductions is aid for postdoctoral students who serve as graduate student instructors. The decline of science education is the most damaging indictment of present administration policy; it threatens to cripple the national effort in science for years to come.

Ironically, however, these are not the words of a partisan for the research establishment, but those of Richard M. Nixon, spoken in October 1968 during his candidacy for the presidency. One can only understand this slip twixt cup and lip by recalling the advice given by ex-Attorney General John Mitchell to black leaders who were protesting the deterioration of civil rights programs under the Nixon Administration —"You would be better advised to watch what we do rather than what we say."