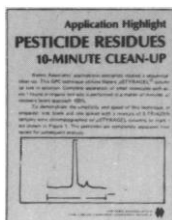


# NEW required reading

## on the Separation of Pesticides

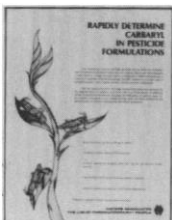
### Pesticide Residues 10-Minute Clean-up



Describes use of High-Speed Gel Permeation Chromatography for 10-minute "clean-up" of pesticide residue samples prior to quantitation.

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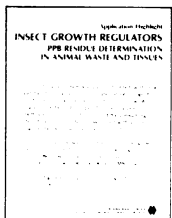
### Rapidly Determine Carbaryl in Pesticide Formulations



Describes High-Performance LC as a precise, rapid, and direct method for the determination of carbaryl (1-naphthyl N-methylcarbamate) at all levels and in all formulations.

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### Insect Growth Regulators ppb Residue Determination in Animal Waste and Tissue



Reports development of an analytical method which utilizes liquid chromatography to quantitate residue levels (ppb) of insect growth regulators in animal waste and tissue.

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causes may supervene (for example, an elderly woman who has had a "successful" mastectomy, dies of cerebrovascular hemorrhage 3 years later, before clinical evidence of recurrence of the breast cancer has manifested itself).

The College of American Pathologists, in its Inspection and Accreditation Program, requires a cross-indexed surgical pathology and autopsy file of all diseases diagnosed, including cancer. Thus a readily available source of information can be easily tapped for a more comprehensive and reliable index of the incidence of cancer. When seeking to find the relationship of the environment to cancer, what is important is not cancer mortality but cancer incidence.

With cancer incidence data, EPA could plan a productive program with relevance. Without them, much money and time will be wasted and, worse, invalid conclusions might be reached.

Every county in the country might not be covered by this alternative approach to data gathering, but the data generated would provide opportunities to plan investigations on possible environmental carcinogens that would enthuse even the most pessimistic grantsperson in academia, or in state or federal agencies.

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#### References

1. T. J. Mason, F. W. McKay, R. Hoover, W. J. Bolt, T. E. Fraumeni, *Atlas of Cancer Mortality for U.S. Counties: 1950-1969* [Publ. (NIH) 75-780, Department of Health, Education, and Welfare, Washington, D.C., 1976].

### Nuclear Arsenals

Kearny and Wigner, in their letter concerning Soviet civil defense (21 Jan., p. 243), express alarm at the possibility of a Soviet "plan for evacuation" followed by nuclear blackmail threats. They state that, after such an evacuation, "we could destroy only a small fraction of [their population]" and that Wigner has estimated such Soviet losses to be between 2.75 and 4.5 percent.

They do not point out that these are immediate and short-term losses only. Just as in World War II, the majority of the losses would probably be long-term, resulting from lack of food, shelter, and medical care. There are over 30,000 warheads in the U.S. nuclear arsenal—certainly enough to destroy nearly all the housing, power plants, fuel refineries, storage depots, major factories, and transportation systems in the Soviet

Union. Fuel, machinery, and fertilizer would not be available for modern agriculture, nor would there be means of transportation to distribute the food. Only a small fraction of the present population would be able to "live off the land" even in warm months. History has shown that modern man is incapable of surviving the Russian winter without housing, heavy clothing, food, and space heating.

Americans and Russians to whom I have talked about nuclear war have the concept of being "bombed into the Stone Age." Whether they die within 10 seconds or 10 months is not significant. These people find the enormous nuclear arsenals of the United States and the Soviet Union more than an adequate deterrent under any circumstances. I find it inconceivable that the leaders of the Soviet Union would allow their country to be "bombed into the Stone Age," even if the population is evacuated.

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### Rocky Mountain Spotted Fever: Occurrence in Massachusetts

McEnroe's statement (Technical Comments, 4 Feb., p. 506) "Preliminary screening of *D[ermacentor] variabilis* from inland Massachusetts has indicated the presence of RMSF [Rocky Mountain spotted fever] rickettsiae . . ." needs clarification. To date, none of the rickettsial strains isolated by us from Massachusetts populations of *D. variabilis* ticks are referable to *Rickettsia rickettsii*, the causal agent of RMSF. Instead, all share a major antigenic component with *R. montana* (1). The latter, a distinct member of the spotted fever group, is characteristically an agent of low virulence for laboratory animals and of questionable clinical significance. Obviously, *R. rickettsii* does exist in Massachusetts (2). However, in our experience, its frequency of occurrence in *D. variabilis* is lower than that for the milder strains of the RMSF group.

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#### References

1. D. B. Lackman, E. J. Bell, H. G. Stoenner, E. G. Pickens. *Health Lab. Sci.* 2, 135 (1965).
2. G. W. Hazard, R. N. Ganz, R. W. Nevin, A. H. Nauss, E. Curtis, D. W. J. Bell, E. S. Murray. *N. Engl. J. Med.* 280, 57 (1969).