the chill in relations between the Soviet Union and the United States.

The time may well be ripe for a bold initiative on our part. Specifically I have in mind an invitation to the Soviet Union to join the United States in a massive 5vear system of exchange visits of 1 to 3 months by laymen. These would include seminars on the implications of nuclear war. I suggest that the United States propose to the Soviet Union that this scheme be supported by a 3 percent reduction in the military budgets of both countries. Clearly there would be enormous diplomatic, political, logistic, and linguistic problems, but these would be trivial in comparison with the consequences of a nuclear war.

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## **Environmental Stress on Plants**

J. S. Boyer (29 Oct., p. 443) convincingly demonstrates that environmental stresses play a very large role in limiting agricultural productivity. Improvements in the adaptation of most plants to stressful environmental conditions could demonstrably increase productivity, and do so in a benign, environmentally sound fashion. Yet while the Competitive Research Grants Program of the U.S. Department of Agriculture supports various research areas including biological stress, that is, stress imposed on organisms by other organisms, research on environmental stress is not supported by the program. Boyer's article constitutes a powerful argument for including research on environmental stress in the Department's Competitive Research Grants Program; it should be heeded.

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## **Cotton Dust Research**

We protest the implication in Marjorie Sun's article "OSHA reviewing cotton dust standards" (News and Comment, 24 Sept., p. 1232) that our scientific views are influenced by the source of our funding and express our deep concern that Sun's article does not address the scientific merits of the questions at issue.

The charge is made by a union official that the School of Textiles at North

Carolina State University receives "hefty support from industry." In fact, more than 80 percent of our support comes from state appropriations and outside grants and contracts from nonindustrial sources. Of the funds we receive from industry, 40 percent comes from an endowed foundation. The industrial support that we do receive is fairly well balanced between the synthetic fiber and the primary textile industries. The former stands to gain by a costly cotton dust standard, while cotton constitutes less than one-fourth of the fiber used in the primary industry. Thus, even if our views were influenced by our source of industrial support, it is not clear which side of the issue we should favor.

Historically, our school has been involved not only in research aimed at technological and scientific advancement of textiles but also in creating better working conditions for employees in the industry. There are more than 300,000 employees in textile-related jobs in North Carolina alone, many of whom are working in cotton plants. As the only textile school in the North Carolina University system, we have strong obligations and commitments to the citizens of North Carolina as well as to the industry. We are proud of our efforts in meeting these responsibilities.

Sun's article deals extensively with the alleged biases of four members of the National Academy of Sciences (NAS) panel. These allegations were made by a union official and by researchers whose published work strongly commits them to the position that exposure to cotton dust represents a proven and extreme chronic health risk. We resent the fact that our integrity is questioned and that the biases and potential biases of those supporting positions different from that of the NAS committee were not examined.

In addition, Sun does not discuss the composition of the NAS panel. The article merely repeats the charge "that the 12-member panel was not balanced in scientific expertise." In fact, nine of the 12 panel members were experienced in medical, chemical, physical, and/or engineering aspects of cotton dust research, and the other three were distinguished scientists in relevant fields but with no direct prior experience in cotton dust research (an internist/immunologist, an immunologist/pathologist, and a lung pathologist). The committee was chaired by one of these three, and the final report was approved by 11 of the 12 panel members. These three panel members were able to assess the relevant data and papers on their merits, free of any preconceived opinions. What better representation could be selected to enable a review panel to objectively evaluate conclusions already "cast in concrete"? This approach contrasts sharply with that of the World Health Organization (WHO) panel, which was chaired by a scientist who holds a well-established position on chronic byssinosis. We are also disturbed by the fact that conclusions from the WHO study, a document that has not yet been released to the public, are cited in Sun's article.

For these reasons, we view the News and Comment article to be less than objective.

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Information about sources of support was provided by William E. Smith, assistant dean of North Carolina State University's School of Textiles. He did not disagree with the characterization that the school received hefty support from industry. In his own words, he described industry funding as "considerable."

-- MARJORIE SUN

Erratum: In the report "Maternal ethanol exposure induces transient impairment of umbilical circulation and fetal hypoxia in monkeys" by A. B. Mukherjee and G. D. Hodgen (12 Nov., p. 700), the ordinates for parts A and B of figure 2 (p. 701) were reversed. Correctly labeled parts A and B are printed below

