LETTERS

U.S.–Polish Exchanges

Jeffrey L. Fox's reference to cessation of scientific exchanges between the United States and Poland following imposition of martial law and the expulsion of an American diplomat from Warsaw (News and Comment, 10 Aug., p. 605) presumably refers only to official government exchanges. The exchange program between the National Academy of Sciences and the Polish Academy of Sciences has continued uninterrupted since the original memorandum of understanding was signed in 1966.

VICTOR RABINOWITCH
Office of International Affairs, National Research Council, 2101 Constitution Avenue, NW, Washington, D.C. 20418

Human Rights in Central America

We the undersigned attended the symposium "Science and Crisis in Central America" at the AAAS annual meeting in New York on 28 May. We were appalled to learn of the situation faced by scientists and technicians in Central America. As pointed out at the symposium by Julio Quan, former director of the Center for Population Studies at the University of San Carlos in Guatemala and now living in exile in Costa Rica, scientists seek the truth, and in countries like Guatemala and El Salvador the truth is considered subversive. This has resulted in terrible repression of many scientists in these countries. Assassinations, disappearances, incarceration, and torture of scientists are common in Guatemala and El Salvador. According to Ricardo Calderon, former secretary general of the University of El Salvador, more than 250 scientists and technicians and 300 university students have been assassinated or have disappeared in El Salvador alone.

Scientists are also a special target of attacks in Nicaragua, in this case by the "contras" supported by the U.S. government. The contra forces have announced their intention to eliminate technically trained persons, Nicaraguan or foreign, who are working with the Sandinista government, and they have murdered dozens of agronomists, doctors, nurses, and teachers. The hundreds of newly trained pest management technicians in Nicaragua's innovative cotton boll weevil control program, for example, fear for their lives as a result of their newly acquired knowledge, and the several hundred U.S. citizens working in a technical capacity are similarly put in jeopardy. These attacks on scientists and destruction of the projects on which they work are resulting in a serious regression of science and development in the region.

In light of the passage of the resolution on human rights by the AAAS council at the New York meetings, we ask the AAAS to investigate the situation of science in Central America and to speak out officially and forcefully.

We recognize that the Committee on Scientific Freedom and Responsibility of the AAAS has already focused its attention on the scientific community in South and Central America, and AAAS through its participation in Interciencia has promoted scientific cooperation in the region. We encourage an expansion of efforts in this regard, providing whatever resources are necessary to expand on what has already been done with regard to the acute situation in Central America.

JOHN H. VANDERMEER*
Division of Biological Sciences, University of Michigan, Ann Arbor 48109

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1. Toronto *Globe and Mail*, 2 May 1983, p. 1; J. Collins, *What Difference Could a Revolution Make? Food and Farming in the New Nicaragua* (Institute for Food and Development Policy, San Francisco, ed. 2, in press).

*Additional signers: Pamela Anderson, Harvard School of Public Health, Harvard University, Boston, Massachusetts; Douglas Boucher, University of Quebec, Montreal; Philip Bereano, University of Washington, Seattle; Mark Bohlke, University of Michigan, Ann Arbor; C. Ron Carroll, Baylor University, Waco, Texas; R. E. Cordray, Huntsville, Alabama; Charles O. Gardner, University of Nebraska, Lincoln; Barbara Goldoftas, Cambridge, Massachusetts; Albert Lyerly, Hughes Aircraft Co., Fullerton, California; Roald Peterson, Fayetteville, Arkansas; Steven J. Risch, University of California, Berkeley; James Ruttenber, Centers for Disease Control, Atlanta, Georgia; Terry Sabonis-Chafee, International Student Pugwash, Washington, D.C.; Edward Villoseca, Hughes Aircraft Co., Fullerton, California.

Learning in the Womb

I would like to clarify some of the statements made in the article "Studying learning in the womb" by Gina Kolata (Research News, 20 July, p. 302). The original work on in utero taste-odor aversion conditioning in the fetal rat was conducted by Greg Stickrod at the University of Oregon in the Psychology Department. His findings were then replicated in my laboratory, and we—Stickrod, Daniel P. Kimble (also of the University of Oregon Psychology Department), and I—published the findings jointly (*1*). Stickrod was the pioneer in this area, and he should be credited with the "discovery" of this phenomena.

WILLIAM P. SMOTHERMAN
Laboratory for Psychological Research, Department of Psychology, Oregon State University, Corvallis 97331

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1. G. Stickrod, D. P. Kimble, W. P. Smotherman, *Physiol. Behav.* **28**, 5 (1982); *Peptides* **3**, 881 (1982).

The Origin of Maize

According to the catastrophic sexual transmutation theory (CSTT) of Hugh H. Iltis (25 Nov. 1983, p. 886), the maize ear originated by a transmutation in teosinte of the target area for expression of the secondary male traits to also include the female spike. This transmutation supposedly accounts for the archeological record in which there seems to be a sudden despecialization of the teosinte female spike with a concomitant loss of induration, a reduction of cupules and a reactivation of the second member of paired spikelets. But the oldest maize cobs still resemble the teosinte ear more than its tassel with respect to both cupule development and glume shape.

The phenotype of the tassel seed mutants of maize should be an example of what happened according to the CSTT. But the morphology of neither tassel seed maize nor of tassel seed teosinte fits Iltis's theory. In both cases female development in the tassel is associated with the fruit-case derivatives for cupules, induration, and glume shape typical of their normal target areas. Even with normal teosinte and maize, the female areas within the mixed (bisexual) inflorescences that usually terminate tillers are also associated with these fruitcase derivatives as expressed in their ear type, contrary to the expectations of the CSTT.

It is also significant that the long rachilla characteristic of the oldest cobs is absent in both the ear and tassel of teosinte, so it could not be derived from transmutation from the tassel. Rather, the long rachilla is one of several pleiotropic effects that are controlled primarily by a series of multiple alleles at the tunicate locus. These other effects include softer, longer female glumes and some cupule reduction—traits that, according to Iltis's theory, would be attributed to transmutation, but more proba-