

about nutrients imported from outside fields in the form of feed for the farm animals? Alternative farming certainly deserves more attention from researchers and rural-policy makers in order to develop the healthy production systems needed for future generations. This challenge, however, may not gain much by the presentation of controversial results.

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Response

WE AGREE WITH ZOEBL THAT ALTERNATIVE farming systems deserve more attention in order to develop healthy production systems. In fact, the environmental advantages of organic farming in comparison with intensive conventional production methods have been shown in many cases (1). In our study, we showed a better protection of soil fertility in organic systems compared with conventional systems.

Efficient use of fossil energy is another important topic. Organic farming has proven to be more efficient in most cases (1). Both articles (2, 3) cited by Zoebl in support of the claim that organic farming would have a lower energy efficiency are inappropriate, because they only cover the efficiency of French and Swedish conventional agriculture between the 1960s and the 1990s and make no claims about organic farming systems. However, organic farming also makes use of modern techniques and biotechnology, improving its efficiency.

The relatively low wheat yield reduction in organic farming in our experiment is in accordance with other results from the region (4–6). Yield differences may be greater in intensive farming in Europe (7), or yield may be similar in extensive production areas in the United States (8). The supposed worldwide 50% reduction of grain output if synthetic fertilizers were not used is not substantiated by any data in the cited article (9). Zoebl suggests that we did not take animal feed into account, whereas in fact it was taken into account, because fertilization intensity in the organic systems (life stock units per hectare) was based on the amount of feed stuff produced in the experimental rotation, mimicking a closed system on farm level.

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Would Title IX Help Women in Science?

AS A YOUNG WOMAN IN SCIENCE, I WAS PARTICULARLY disturbed by Jeffrey Mervis's article "Can equality in sports be repeated in the lab?" (News Focus, 11 Oct., p. 356). The discussion concerns a proposal that universities should be forced to employ more women on their science faculty or else face a federal budget cut. The purpose of such a measure would be to increase female representation in science, as Title IX has done for female participation in sports. A fundamental difference between sports and science is presumably overlooked in this comparison. Unlike in athletics, smart, educated women can compete equally with their male counterparts. No amount of federal regulation will make the average sportswomen perform at the level of her male counterpart, but it can and does increase female participation and enjoyment in sports. Science, on the other hand, requires a high intellect, interest, opportunity, and a solid education. Lack of the latter two have restrained females of past generations, but the gender gap in education and opportunity is closing. Affirmative action may serve to broaden the pool of female scientists, but it will also weaken it—lower requirements naturally mean lower quality. As a result, the old preconception of male intellectual superiority will be reinforced, the status of women in science be reduced, and we will be back to the system that we are apparently fighting. I speak for many satisfied and successful (and therefore quieter) female scientists when I say, "Don't marginalize us!"

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JEFFREY MERVIS'S "CAN EQUALITY IN SPORTS be repeated in the lab?" (News Focus, 11

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