

## nature biotechnology

Letters may be edited for space and clarity. They should be addressed to:  
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### Direct action

To the editor:

For the benefit of your readers, I hope that the technical analysis in your publication is superior to your editorial on the impact of Greenpeace's activities on biotechnology companies (*Nat. Biotechnol.* 18, 1015, 2000). The idea that the poor employment prospects of Ecogen's staff are somehow caused by the rejection of agricultural biotechnology by a hysterical and irrational public is, frankly, ludicrous. In Europe, and increasingly in the United States, consumers and citizens are justifiably angry at being characterized as gullible fools hexed by "eco-pagans." Those consumers rejecting GM technology are making sophisticated judgments based on their own knowledge and intuition, rather than accepting the bland assurances of the advocates of the technology. The absolute exclusion of the public from any participation in the decisions about the deployment of the technology no doubt forms a large part of the growing rejection of biotechnology. Ecogen's biggest problem is not opposition by Greenpeace or other activists, but rather its acquisition by Monsanto, the most bullish of biotech's corporate advocates. Indeed, Ecogen's downward slide, from 1996 to December 1999, significantly predates the verdict concerning the Lyng action on 20 September 2000. Being dropped from the Nasdaq is not a consequence of effective campaigning by concerned citizens and activists, but rather a confirmation by the market that to be successful, biotechnology companies will need to produce identifiable benefits for customers and the environment, and not just the companies flogging their products.



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Nature Biotechnology replies:

Dr. Cotter-Howells appears confused about the point of our editorial. It was merely that Greenpeace (and other "friends of the earth") indirectly prevent the development of "eco-

friendlier" products (there are no absolutes). Ecogen had such products, born of GM and other approaches. Adverse public and investor sympathies made it difficult for that business to thrive. More importantly, she suggests that part of consumer discomfort with GM stems from a noninclusive regulatory system. We agree. However, the admittedly hesitant moves by governments in Europe to broaden the democratic base—entrusting the public with details of experimental GM plantings, for instance—have been rebuffed. Greenpeace's vandalism of the trial at Lyng, though not ultimately illegal, was certainly antidemocratic and counter to the advancement of knowledge and truth. Incidentally, those who do read the technical analysis and understand the editorials in our publication find both rewarding.

### Cloned pig litter update

To the editor:

Due to unfortunate circumstances in managing an unruly first-time mother, the second litter of clone piglets reported in the October issue (*Nat. Biotechnol.* 18, 1055, 2000) were lost one-week after their birth. The mother's aggressive behavior toward the piglets forced us to limit the time they were with her to nurse, which failed to provide adequate nutrition to sustain their healthy appetites. By the time we intervened, it was too late to reverse the adverse nutritional condition of the piglets. In general, baby piglets of such a young age do not respond favorably to supplemental milk. Problems associated with primiparous gilts during their first litter are not uncommon in a production environment. However, the risk of her not accepting the piglets was exacerbated by the heightened attention she received during the farrowing process. Piglets from the first litter continue to exhibit normal growth patterns, and no complications in their rearing have been encountered.

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### Breaching principles

To the editor:

I read with interest the articles by Anna Meldolesi published in the September issue (*Nat. Biotechnol.* 18, 919, 2000) that discuss the "rejection" on 16 December 1999 of three oils derived from GM oilseed rape and four products derived from GM corn by the Italian National Institute of Health (Istituto Superiore di Sanità, ISS). I would like to clarify what exactly happened.

The ISS statement issued in December 1999 was based on a specific legal interpretation of the relevant European Union directive, equating the words "substantive equivalence" with "identical chemical composition." Given the sensitivity surrounding GM products, the Italian minister of health, during July 2000, asked the ISS to produce "a more in-depth and better documented opinion" on the subject. The ISS responded with a formal statement, sent to the minister on 28 July 2000, in which it stated that "it was the duty of the Ministry's Legal Office to correctly interpret the EU directive." ISS then prepared a document providing a purely technical and scientific opinion regarding the substantive equivalence of the seven GM products compared with their "natural" counterparts. This new document concluded that "in terms of micro- and macro-nutrients, the seven GM products presented a substantive identity with their traditional counterparts," although for some microconstituents the documentation received did not contain a comparative evaluation between the GM and the natural product. ISS also evaluated in detail the safety of the products in question, concluding, "there is no reason to believe that a risk for human or animal health could ensue from the consumption of products derived from the GM plants in question." The end of the document also stated "the Institute feels that it should not comment on the possible risks associated with the 'release into the environment' of these GM organisms or products derived from them."

On 4 August 2000 the prime minister of Italy issued a decree that, after citing extensively the formal opinion provided by the ISS, concluded: "the commercialization and utilization of GM products Mais BT 11, Mais MON 810, Mais MON 809 and MAIS T25 is suspended, in accordance with what is in the premise." In support of his decision, the prime minister wrote that "the formal statement of the Istituto Superiore di Sanità does not express an opinion on risks arising from the possible 'release into the environment' of the GM products, in spite of the proven permanence of residues of modified components in the product"; the lack of this information meant "a clear breach in the principle of precaution, generally agreed in this matter."

It seems self-evident that this inference is devoid of any scientific basis, as the "release into the environment" could relate only to the products, not the plants or seeds.

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