BUSINESS AND REGULATORY NEWS

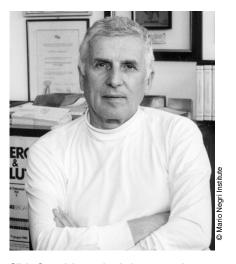
Italy performs GMO trial about-face

On 13 February, top scientists rallied in Rome against the Italian government. What started as a protest against the anti-GMO policies of the country's Green agricultural minister, Alfonso Pecoraro Scanio, has turned into an internationally supported call for scientific freedom from researchers across many disciplines. As a result, there has been an about-turn with respect to research involving GMOs in Italy and the scientific community is riled up to fight for the right for politically and ideologically independent research. However, none of this is likely to have any effect on the impasse currently dogging commercialization of GMOs in Europe.

The final straw came when Pecoraro Scanio, who has constantly tried to thwart agbiotech research, refused to fund experiments-be they in field trials or laboratories-involving GMOs. Although several European countries oppose the commercialization of GMOs, Italy became the only country to ban all research involving GMOs. The move was perceived as an attack on scientific freedom in general, prompting a petition against Pecoraro Scanio that was signed by over 1000 Italian researchers and supported by the international agbiotech community (Nat. Biotechnol. 18, 1229, 2000). Although Pecoraro Scanio subsequently claimed his decree was a misprint and that he was referring to field trials only, the protest snowballed, making newspaper headlines for weeks, and culminated in the February rally. "Italy was the most anti-GMO country in Europe last year," says Giuseppe Rotino, a researcher of the Institute of horticulture in Montanaso Lombardo near Milan, "and now it is the theatre of a revolt by scientists without precedent in the developed world."

The research situation is particularly dire in Italy because, as Silvio Garattini, director of the Mario Negri Institute in Milan, points out, "Italian research is trapped by two extremes, the green one and the religious one." (Research on cloning and stem cells is at risk through politicians' desire to appease the Vatican.) Italy hasn't produced a new drug in the last 6 years, says Garattini. "We just can't accept restrictions in the name of ideologies."

As a result of the protest, which has attracted wide international interest, Italian politicians have fallen over themselves to publicly support biotechnology and distance themselves from the Green anti-GMO campaigns that, until now, have been shaping Italy's agbiotech policies: the health minister, oncologist Umberto Veronesi, has stated he is on the side of scientists against the agriculture minister; the two presidential candidates have assured the public that the next government will be less insensitive to the needs of researchers; and the current premier, Giuliano Amato, has forced Pecoraro Scanio to allow the first open field trial of GM crops—a humiliating defeat for the minister.



Silvio Garattini says that Italy cannot tolerate research restrictions based on ideologies.

However, although a victory for the agbiotech community, the permission for a field trial is merely a token gesture, and much still needs to be done for researchers. The government says it plans to set up yet another new committee to oversee the field trial, but there are already several such biotechnology committees and, as Roberto Defez of the National Research Council points out, the trouble with them is that many scientists involved in them are more concerned with pandering to politicians than presenting credible science. What is needed, he says, is authoritative, politically and ideologically independent scientific committees, whose exponents are scientifically credible.

Nevertheless, the field trial about-turn has filled the agbiotech community with optimism. "This is proof that to efficiently tackle antiscience propaganda, Italian scientists must actively participate in the public debate on science and have, as we will have, their own 'lobby'," says molecular biologist Angelo Spena of Verona university.

However, the episode is unlikely to have any effect whatsoever on the political impasse that is blocking commercial planting of GMOs in Europe (Nat. Biotechnol. 18, 589, 2000). "We can hope that, thanks to this impressing action by Italian scientists, the number of field trials will finally increase in our country," says Giuseppe Battaglino, health ministry representative inside the Interdepartmental Biotechnology Committee, which advises the government on GMO policies and oversees authorizations for field trials. But "the situation is more difficult to solve with respect to GM crops commercialization, which depends heavily on political balance and consumers attitude."

Indeed, in February, the European parliament approved revisions to directive 90/220 governing the release of GMOs into the environment, imposing mandatory monitoring and risk assessment of GM crops and setting guidelines on labeling. However, the environment ministers of France, Italy, Austria, Luxembourg, Greece, and Denmark say they will continue to block the approval of GM products until there is legislation that ensures they can be traced through the entire production chain. With the Commission's refusal to fight the envirocrats and enforce the directive, the legislation is irrelevant and the de facto moratorium remains.

Anna Meldolesi, Rome

Survey raises concerns about Bt resistance management

Almost 30% of farmers in the US are failing to comply with management protocols designed to prevent the emergence of insects resistant to *Bacillus thuringensis* (Bt) toxins, according to a survey conducted by US corn growers and seed companies. At least one group is calling for revision and enforcement of the resistance management plan. However, there is no evidence of Bt crop resistance, and second generation Bt crops may render the plan obsolete.

Bt corn has been genetically modified to express Bt toxin proteins, killing insects that feed on it. According to the Environmental Protection Agency's (EPA) resistance-management strategy, which was updated last year, 20% of the total