

Swiss transgenic vote hangs in balance

[MUNICH] Tension is running high among scientists in Switzerland on the eve of the country's referendum on genetic engineering, to be held next Sunday (7 June).

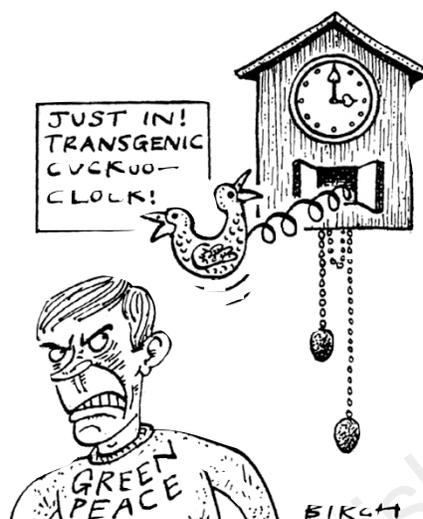
Some are backing an initiative provocatively called 'Genepeace', launched by student supporters of genetic engineering in Zürich, Basel and Bern. Genepeace aims to promote peaceful dialogue between geneticists and opponents of genetic engineering — but also warns of the consequences of its possible abandonment in Switzerland.

The referendum proposes a ban on research involving genetically modified animals and on field trials with genetically modified plants (see *Nature* 392, 741; 1998). Despite discreet lobbying by the pharmaceutical industry — and grim warnings of the possible consequences of a 'yes' vote — the outcome of the referendum remains highly uncertain.

The most recent survey, by the German-speaking Swiss Television TVDRS two weeks ago, found that 39 per cent of interviewees were opposed to the ban, 37 per cent were in favour, and the rest were undecided.

But in an earlier survey by the newspaper *Sonntagsblick*, only 16 per cent said they would vote for the abandonment of genetic research, with 32 per cent saying they intended to vote against, while more than 50 per cent were still undecided.

In fact, the result may have already been



decided, because a large proportion of voters has delivered postal votes. Conrad Engler, head of gene technology at Interpharma, the association of the Swiss pharmaceutical industry, says that campaigners for and against the ban are now usually told by the public they approach: "You don't have to convince me any more; I have already voted."

Nevertheless pressure groups have been stepping up their campaigning efforts — some serious, others less so — over the past few weeks. Greenpeace and the World Wild Fund for Nature, for example, are suing the University of Geneva for selling transgenic

mice as animal food to zoos.

Greenpeace has also sued academics — including Klaus Ammann, head of the botanical garden in Bern, and Beda Stadler, a professor of immunology in Bern, both of whom had joined the 'Genepeace initiative' — for abuse of its name and logo.

Genepeace includes among its members Rolf Zinkernagel, director of the Institute for Experimental Immunology at the University of Zürich and 1996 Nobel laureate.

The initiative was launched after 20 or so Greenpeace activists mixed with the crowd of 3,000 students, academics, medical doctors and researchers who demonstrating in April in Zürich against the proposed bans on genetic engineering.

The Greenpeace activists carried placards that differed only subtly from those of the scientists. Greenpeace changed 'Gen Suisse', the name of a foundation supporting gene technology, into 'Gen *Bschiss*', a German word for 'swindle'. In revenge, supporters of genetic engineering found a pun of their own, and launched 'Genepeace'. Ammann and Stadler are among those who have worn T-shirts bearing the 'Genepeace' logo, which, according to Greenpeace, was deliberately intended to confuse the public.

Despite the high emotions that the campaign has generated, little more than 40 per cent of the Swiss population are expected to cast a vote.

Quirin Schiermeier

Italian and US backers improve prospects for cheap trip to Mars

[MUNICH] The lifetime of Mars Express, the fast and cheap voyage to Mars proposed by the European Space Agency (ESA), could be doubled following an offer from NASA and the Italian Space Agency (ASI) to provide the mission's telecommunications system and other assistance.

Under a suggested three-way deal, ASI will build a 64-metre radioastronomy dish, while NASA's equipment would allow the voyager to relay data from the US space agency's Mars Lander in 2005. The Italian agency has also offered to consider providing ground support for the mission. The cost of ground support would increase significantly since the proposed agreement would extend the mission's life from two to four years.

The politically popular Mars Express mission, which it is hoped to launch in 2003, comes up for formal approval by Europe's research ministers in November. Last week's meeting of the agency's Science Programme Committee (SPC) accepted the trilateral agreement in principle. The deal could be ready for signing as soon as the mission is formally approved.

By cutting the overall costs of both ESA's and NASA's Mars missions, the agreement will allow the scientific returns to be increased, says the SPC. It would also open the door to closer coordination of the two agencies' Mars missions, something that both sides would like to see.

Giovanni Bignami, ASI's director of space science, says that the Italian end of the telecommunications package would be paid for by ASI's technology programme, rather than its science programme, so there is no danger that it will impact on ASI's funding of other ESA science projects such as the cometary mission Rosetta.

The telecommunications system would transmit and receive data from experiments and landers on the planet surface from the low orbit of Mars Express. So far, none of the 12 proposed landers for Mars Express has been approved by ESA, as none has secured the necessary assurances of national financing.

But the SPC approved a payload of seven on-board experiments including subsurface radio-imaging of the planet surface's structure, photographic and spectrometric

imaging of the surface, atmospheric physics and magnetospheric physics.

ASI has offered the data collecting services of its radiotelescope currently being built in Sardinia, and which is partially funded by the European Union. This radiotelescope, scheduled to become operational in 2001, will be able to receive not only natural radioactivity from space but also data from planetary probes including Mars Express.

At last week's meeting, the SPC also overruled a proposal from ESA officials to merge two of the agency's planned missions, the 'cornerstone' Far Infrared Space Telescope and the cosmic microwave background surveyor Planck (see *Nature* 387, 639; 1997).

Although a merger would have saved a considerable amount of money, the SPC argued that the scientific return would have diminished to an unacceptable level.

The two missions will now share the same satellite, but will be physically independent. The proposed launch date for the two missions will now slip back one year, to 2007.

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