Plant breeding

The seeds of commerce

ANOTHER firm step has been taken by the UK government towards privatizing the National Seed and Development Organisation (NSDO), which produces and markets seeds of new plants that emerge from government-supported research, and the major source of NSDO's new plants, the Plant Breeding Institute (PBI) of the Agricultural and Food Research Council (AFRC). Within hours of last week's announcement that the government is to seek financial advice on how best to proceed with the sale of NSDO and the plant breeding, as opposed to the plant science, programme of research at PBI, one company was singing its own praises as the best possible buyer.

NSDO has been a candidate for priva-

tization for nearly two years because it is a profitable business. Last year it recorded a profit of about £7 million, of which £4.65 million was returned to the Treasury, while only about £2.5 million was spent by the council on plant breeding research at PBI, from which nearly all of NSDO's new varieties have come.

But the plan to make the sale more attractive by including half of PBI is more recent and has been opposed by the institute, which fears that the remaining plant science research will suffer as a result. Reacting to the decision the institute's director, Professor Peter Day, said that the institute has always prided itself on covering the spectrum from molecular biology to the production of finished new varieties of plants and the challenge now will be to maintain the status of the science programme on its own. In any case, the institute will now have to develop a new strategy of research, probably concentrating more on alternative crops than on the mainstays of NSDO and almost certainly acquiring some breeding facilities.

Because financial cuts have made it impossible to maintain the *status quo* at PBI, and because the case for supporting research there by the profits of NSDO has failed to win the day with a government set on privatization, Day will now have to work out a new strategy for the remaining half of the institute. The worst outcome, he said, would be if the science and breeding activities were altogether separated as might happen if the remaining scientists are moved elsewhere. The best that can be hoped for, says Day, is that business will continue much as now except for the inevitable differences necessitated by the terms of any formal relationships between the remaining scientists and the new employers of its plant breeders, or at least those that are lucky enough to gain such employment.

Such might be the case if the Agricultural Genetics Company of Cambridge became the new owner, according to Roger Gilmour, its chief executive. The company was set up three years ago with the help of the government-owned British Technology Group and was given first rights to develop and market discoveries made by plant scientists at AFRC institutes. The rights are for five years in the first place and negotiations for their renewal are due this summer. At least as important to the company as the renewal of these rights is that it should continue to have access to a plant breeding facility and a seed marketing organization. The company's future seems bleak if it fails in its bid to buy NSDO and the part of PBI that will be for sale.

When the sale will be and exactly what

will be on offer is anyone's guess. It seems very likely, however, that the two places on offer will be sold together and to a single buyer.

The government is obliged to go through a procedure of appointing an independent financial adviser to report on the best way to go about the sale. Only when such an adviser has been chosen from applicants and has reported to the government is any further statement expected. It may then also become clear whether it is the Treasury or AFRC that will be the beneficiary of the sale.

Peter Newmark

Ariane satellites up

FRENCH — and Swedish — space scientists breathed sighs of relief last week as the mostly French-built European space launcher Ariane lifted two satellites safely into orbit. This was the first launch for some months, after the last was aborted when a third stage rocket motor failed. The present launch, which put up the first French Earth-observation satellite, SPOT1, and the Swedish research satellite Viking, had been delayed when a German-built cooling system was found to be leaking.

SPOT1 is following a near-polar orbit at an altitude of 822 km. It carries both vertical and sideways-looking cameras, so the same site can be pictured twice from different directions on successive orbits, as the Earth turns beneath the satellite's path, thus yielding three-dimensional images of the surface which will be useful for the mapping of remote areas. Some potential users in Africa, however, have complained that the technologies employed by SPOT1 will not be of much use for crop management and agricultural planning, but are much better tuned to monitoring defence installations and troop movements. As SPOT1 images will be available commercially, this could lead to some political difficulties.

Robert Walgate

Vera Rich adds: The Swedish Viking satellite will study the region of acceleration of incoming solar wind particles, which, when entering on the dark side of the Earth, become pumped in energy and in latitudes 65–75° interact with the atmosphere to produce the visible aurora. The Viking satellite has 40-m wire booms to trap the particles, and first results are expected in about two weeks.

The Swedes, however, are not totally committed to Ariane as a launch vehicle. The Swedish Space Corporation is considering production of a small (100kg) telecommunications satellite MAILSTAR, which will carry telex and telephone traffic to the third world. A tentative agreement has just been signed giving China first option as provider of launch facilities, should MAILSTAR materialize. □

Join Fermenta?

trepidation. Whereas Volvo has maintained a reputation as a "hands off" shareholder, El-Sayed is considered more likely to meddle. If the initial arrangement with Volvo were to be finalized, the Egyptian-born Swede would wind up with almost 50 per cent of Pharmacia's voting shares.

It is hard to say how closely El-Sayed's credibility is linked with shareholder confidence, but one analyst says that the man named 1985 Swede of the Year is now "lethal to his own company". El-Sayed owns more than 70 per cent of Fermenta.

The preliminary results presented last week, intended to restore investor optimism, contained profit figures of SKr 3,320 million that were augmented by minority interest from other Fermenta holdings, primarily the Italian pharmaceuticals company Peirell.

In the wake of these blemishes, says Fermenta, El-Sayed gave up his leading position in order to devote more time to the company's future, as director of long-range planning and acquisition. Others suggest that he acted on the insistence of Svenska Handelsbanken, Fermenta's parent bank, which had unwittingly proclaimed El-Sayed's credentials in a prospectus issued last summer for a SKr 210 million private offering in London.

Even if El-Sayed and Fermenta escape unscathed from the past week's turbulence, they are still in hot water with the Swedish environmentalist who incited it. Bjorn Gillberg at the environmental centre in Uppsala, who knew El-Sayed as an undergraduate at the town's university, first contested his claims to a master's and PhD degrees. But Gillberg's real concern is Lake Malaren which he believes is being polluted by a Fermenta fermentation plant.

Karen Wright