Pesticides

FDA told to try harder

Washington

THE US authorities are not doing enough to catch and prosecute unscrupulous food growers who may be steadily poisoning the American public through illicit use of pesticides. A study* by the General Accounting Office (GAO) concludes that the US Food and Drug Administration (FDA) is the agency most at fault.

The study shows that the proportion of tested domestically produced food is small (probably less than one per cent), and, more significantly, that over half of pesticides that may be present are not detected by any of FDA's five preferred 'multi-residue' tests. Eight out of the nine most dangerous pesticides used are not detected by these standard tests. The agency uses the more time-consuming and expensive single-residue tests only when it has reason to suspect chicanery.

The proportion of tested samples has fluctuated since 1979 between 1.8 and 4.5 per cent, but more than 5 per cent of fish samples tested over the same period contained illegal residues. FDA says these proportions are not representative of the food supply as a whole, as trouble spots are sampled more often.

But the most disturbing discovery of the report is FDA's record at preventing the sale of adulterated food and prosecuting wrongdoers. In 107 out of 179 cases in which the agency found illegal residues (over a period of more than two years), the food had already been sold by the time the result came through, and in none of the 179 cases did FDA seek criminal penalties. Because the agency lacks detention authority over domestic food, it often cannot prevent such food being exported—but it can seize adulterated imports.

FDA also lacks legal authority to impose civil penalties, a shortcoming GAO would like remedied to provide an effective deterrent. The alternative, costly criminal procedures, is rarely used. Congress may hold hearings on the agency's effectiveness at pesticide control next year, and should be interested in the idea.

Does all this mean that Americans are being poisoned? Not quite. Illegal residues may simply be pesticides applied to the wrong crop, or may exceed approved 'tolerances' by a small amount. The tolerances are supposed to have large built-in safety margins. Environmental groups say, however, that the factor of 10 sometimes used in extrapolating safe dosages from animal studies is inadequate and that tolerances are set before all the relevant data are collated.

Tim Beardsley

Pesticides: Need to enhance FDA's ability to protect the public from illegal residues. (GAO, 1986).

UK industrial research

More stick than carrot on offer

BRITISH manufacturing industry, part of which enjoys lucrative defence contracts, must itself spend more on research and development, says Mr John Fairclough, the government's chief scientific adviser.

Annual government investment in research and development is £4,300 million, of which 51 per cent is channelled into the Ministry of Defence (MOD). In sharp contrast, the Department of Trade and Industry (DTI), one of the principal sources of industrial research funds, has seen its share fall from 7.9 per cent of the pool in 1983-84 to an estimated 5.2 per cent in 1988-89.

The call for more investment came on the publication of the government's review of research and development expenditure. Although Britain invests more in publicly funded research and development than most of its European neighbours, but as a proportion of Gross Domestic Product, the total devoted to civil projects lags behind West Germany, France, Japan and the United States.

Fairclough, who began a two-year secondment from IBM (UK) to the Cabinet Office in May, is attempting to change that ratio. One solution is for companies publicly to disclose their research and development expenditure. Such disclosure, Fairclough believes, would make financiers aware of the long-term strategies being adopted by companies.

The Fairclough solution was not the only one to emerge from Whitehall last week as the government attempted to forge bet-

ity and industry. Government funding is spread over five years and is expected to attract the same from industry.

Mrs Thatcher, in announcing the programme, said that "the excellence of British science has not been matched by a rapid pace of application by British industry of the newly emerging technologies. Nor is the private sector investing as much

Fairclough — more for research.

of its own resources in research and development in this country as are our more successful competitors."

The success of the LINK programme will require cooperation between government departments which in the past have been noted for their rivalry. They are the departments that already have research budgets — the Departments of Trade and Industry, Education and Science, Energy, Environment, Transport, Health and Social Security, Agriculture Fisheries and Food and the Ministry of Defence. The Scottish, Welsh and Northern Ireland offices will also be involved.

There will be a steering committee composed of senior industrialists, academics and officials from the relevant departments and research councils with a brief to foster strategic areas of scientific research directed towards "the development of innovative products, processes and services by industry"; to stimulate industry to increase its investment in research and development; to encourage industry to exploit developments in science; to make scientists more aware of the needs of industry; and to develop technologies that cross the normal boundaries of scientific disciplines.

The Advisory Council for Applied Research and Development, the Advisory Board for the Research Councils, the Assessment Office on Science and Technology in the Cabinet Office are collaborating to find other ways of marrying research to industry.

Bill Johnstone

ter links between its departments, the universities and industry.

Another, credited to the Prime Minister, Mrs Margaret Thatcher, is a programme for re-routing £210 million of the budget for scientific research and development to "speed up the development of products and services from scientific and technological research carried out by universities, government departments and industry".

The programme, called LINK, is to encourage research and development partnerships between the scientific commun-