

IN BRIEF

Safeguards surface

A few days before taking office as Britain's new Prime Minister, Mr James Callaghan, speaking as Foreign Secretary, revealed in reply to a question in the House of Commons details of the safeguards Britain would apply in deals involving the transfer of sensitive nuclear technology. The safeguards, agreed among the (soon to be enlarged) Group of Seven nuclear exporting countries, demand assurances that the exported technology will not be used to make nuclear explosives for any purpose, that there is sufficient protection against the risk of theft or sabotage and that similar safeguards will apply both to re-export of the technology by the recipient and, for twenty years, to independent replication of nuclear plant by the recipient.

Deadline passed

The United States and the Soviet Union are to continue discussions

which might yield a bilateral treaty on nuclear explosions even though they failed last week to meet the March 31 deadline originally set for agreement. The talks began in July 1974, when Mr Brezhnev and President Nixon agreed in principle that peaceful and military explosions should be limited to 150 kilotons and that there should be some on-site inspection. The remaining difficulty chiefly concerns monitoring multiple peaceful explosions which together exceed 150 kilotons that the USSR might wish to use in civilian projects.

Asbestos inquiry

The renewed controversy in Britain over the health risks of asbestos to the public at large as well as to employees in the industry itself has led to the appointment of a government committee to make a wide-ranging review of the hazards involved and of the safeguards in use. The formation of

the committee, to be headed by the chairman of the Health and Safety Commission, has been welcomed by the industry's Asbestos Information Council, and follows the publication of a report by the Ombudsman criticising the Factory Inspectorate's policing of a plant where 40 people died from asbestosis between 1939 and 1970.

UNEP plea

The annual governing council of the United Nations Environment Programme (UNEP), on which 58 states are represented, opened in Nairobi last week with a plea from its executive director, the biologist Dr Mustafa Tolba, that member states fulfil their pledges in order to resolve UNEP's financial crisis and so prevent it curtailing its plans. Only a small proportion of the money pledged has actually been received, with the big countries proving to be the most reluctant contributors.

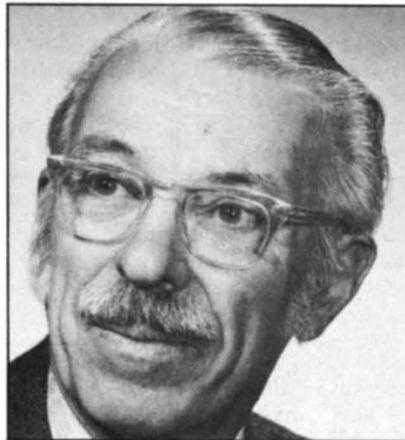
SPRING in California used to be signalled by a procession of fruit blossoms in the well-kept orchards: almonds in February, then apricots, sweet cherries, peaches, and, finally, the miles of prune trees in the Santa Clara valley that have now been displaced by houses. Most orchards have retreated into the background of the concrete invasion. In a few months, the fruit harvest will start with the sweet cherries, and later the wooden lugs of golden apricots will be loaded for shipment.

As a good Darwinian, I feel sure that the sweet and delectable flavour of apricots, enhanced by plant breeding, is meant to encourage me to pick the fruit and walk away with it. Then I shall devour it, and drop the stony pit on the ground so that the apricot will extend its territory when the seed germinates. But the seed doesn't want to be eaten, for this will destroy the embryo. So, in the seed, there is a substance called amygdalin that decomposes when the seed is macerated. This process liberates an enzyme, beta glycosidase, that hydrolyzes amygdalin to glucose and mandelonitrile, a compound of cyanide and benzaldehyde which breaks down to set free HCN. Death to eaters of apricot seeds! Having summarily disposed of its enemies, the apricot will take over the landscape.

The same game-plan is a hallmark of other members of the rose family, and, indeed, of many other plants—sorghums, lima beans, cassava, clovers and acacias. Almonds and beans have been selected by plant breeders for low content of cyanide.

Cassava is soaked, fermented and leached to remove HCN. Until recently apricot pits were discarded, except occasionally the seeds were crushed and added to preserves to

Apricot retaliation



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impart the almond flavour of benzaldehyde. The HCN presumably diffused away during cooking.

A new interest in apricot pits has come about as a result of the "health food" sponsorship of "Laetrile" (amygdalin) for the ineffective treatment of cancer. Dressed up as vitamin B₁₇, which is a completely unjustified soubriquet, Laetrile has become the darling of the diet stores. As a result, the apricot has struck back. Last October, a 34-year-old man residing in San Diego, California, developed symptoms of cyanide

poisoning after eating apricot kernels. A package of the raw kernels was bought at a health food store and made into milk shakes, following a recipe in an "organic food" publication. The man's wife didn't like the taste, so her husband greedily downed both portions, and, one hour later, "developed forceful vomiting, headache, flushing, heavy perspiration, dizziness and faintness". He was rushed to the emergency room of the local hospital, and rescued by a stiff dose of ipecac. Once again, the process of natural selection was thwarted by human intervention.

The state health department drily states in its report "the minimal number of apricot kernels necessary to cause symptoms or death in humans is not known. Since this and similar products are widely distributed in health food stores for reputed nutritional and medicinal value, the possibility of disease from a large number of kernels should be recognised".

As you can guess, my apparently inhuman sympathies are with the plant world. I treat stinging nettles with respect, and I delight in the blue flowers of larkspur and monkshood. Unlike Bret Harte's "mliss", I do not plan to eat the leaves thereof. I disagree with D. H. Lawrence's idea that the devil himself must have conceived the spines of cacti in a moment of sheer ecstasy. Framed in thorns the exquisite blossoms of the cactus are to look at, not to touch. Plants have every right to tell us to keep our distance. *Hommage à Darwin!*