

Plant genetics

Safeguarding the pool

A BINDING international commitment to the conservation of plant genetic resources and to setting up an international commission to monitor work in this field are embodied in an agreement proposed in the recent report of the 22nd session of the Food and Agricultural Organization (FAO). However, the form of agreement, yet to be ratified by member governments, leaves unanswered many questions about administrative and financial relationships with existing organizations. Moreover, by confining the proposed commission to FAO members, the Soviet Union and East Germany, both important holders of plant genetic resources, are excluded as is the United Nations Educational, Scientific and Cultural Organization, which under the Man and Biosphere programme is the main UN agency responsible for *in situ* conservation. The United States, Japan, Canada and Switzerland are thought to have expressed opposition to the agreement and France, West Germany, the Netherlands and the United Kingdom have objected on procedural grounds, because last minute changes to the proposed composition of the commission, instigated by Mexico, prevented adequate consultation between delegates and their home bases.

Governments that ratify the agreement will declare their readiness to "ensure that plant genetic resources of agricultural interest will be explored, preserved, evaluated and made available for plant breeding for the benefit of all human beings". The resources include cultivars, related wild or weedy species and special genetic stocks. The proposed agreement would result in a coordinated network of national, regional and international centres, including base collections which together would form an "international gene bank", under the auspices or jurisdiction of FAO.

Accessions must be held in more than one institution because conservation efforts are subject to human, social and economic failure. For example, of 1,000 sugar clones held in Papua New Guinea in 1955, only 204 remained in 1975. And the fate of the Ethiopian wheat institute is at present unknown. The scale of the problem is immense; there are already 293,000 accessions of cereal crops held in the Soviet Union, United States and Philippines alone. The Asian Vegetable Research Station in Taiwan has acquired 10,000 soybeans in six years. And the International Rubber Research and Development Board, in its annual report published last week, estimates that there are 200,000 rubber genotypes kept as seeds in its Germplasm Centre in Manaus, Brazil. The pressure to collect and store plant genetic resources is increasing as the destruction of wild habitats, natural disasters, urbaniza-

tion and commercialization of agriculture all combine to threaten *in situ* conservation. For example, massive loss of Afghanistan's native wheats occurred in the 1970s after drought, harvest failures and catastrophic famine were followed by importation of thousands of tonnes of seed corn.

FAO fears that commercial pressures contribute to genetic erosion and non-availability of germ plasm, because the adoption of high-yielding strains causes abandonment of genetically rich primitive stocks, and private companies hold large gene banks. However, the existence of a plant breeding industry depends on an adequate return on capital investment protected by plant varieties rights legislation. In addition, developing countries are increasingly acquiring their own breeding and seed-producing facilities and material is freely available from existing international institutes, such as, for example, the Wellsbourne vegetable collection partly supported by Oxfam, the largest UK overseas charity.

The FAO plan may eventually duplicate, replace or absorb the Consultative Group on International Agricultural Research (CGIAR) and the International Board for Plant Genetic Resources (IBPGR). CGIAR supports a wide programme, including the 12 international agricultural research centres, partly supported by countries in which they are situated. It also supports IBPGR, which has effectively pursued a large range of activities including providing basic equipment for national gene banks in 20 developing countries, sponsored 250 collecting missions in more

Eastern AIDS

THE first confirmed cases of acquired immune deficiency syndrome (AIDS) in the socialist bloc were reported last week from Czechoslovakia, where the victims are said to be a Slovak and an African. Hitherto, although there have been unconfirmed rumours of cases in East Germany, the official attitude has been that AIDS, like herpes, is a disease of capitalism.

In Poland, however, the threat of AIDS was taken more seriously, since neglect of the hospital service during the Gierek era has led to cramped conditions and frequent cross-infection due to re-use of disposable syringes and catheters. Last autumn, the weekly *Polityka* assured the public that if the disease reached Poland, the health service would be able to cope.

Following the reports from Czechoslovakia, the Polish Institute of Hygiene has issued a special leaflet to help doctors make a swift diagnosis, and blood donor stations are to take steps to ensure that people with AIDS do not give blood. According to a spokesman for the Ministry of Health, no cases of AIDS have been identified in Poland. Many doctors fear, however, that AIDS symptoms may already have appeared but have been mistaken for some other disease.

Vera Rich

than 70 countries, supported training programmes and published directories on plant genetic resources. However, these autonomous, philanthropic, non-profit organizations lack "legal personality", and in face of the increasing politicization of the issues surrounding plant genetic resources, FAO seeks to create a more institutionalized structure and forum for discussion.

Sarah Tooze

Nature index of biotechnology stocks

12-Month high	12-Month low	Company	Close previous month	Close 28 Feb.	Change
23 1/4	9 3/4	Biogen (Switzerland)	12 1/2	13	+1/2
6 1/4	1 3/8	Bio-Logicals (Canada)	2	1 1/2	-1/2
16 1/8	7 1/4	Bio-Response (USA)	11 3/4	10 3/4	-1
19	10 1/4	Cetus (USA)	13 1/8	11 1/4	-1 7/8
15 1/2	6 1/8	Collaborative Research (USA)	8 1/4	7 5/8	- 3/8
39 7/8	15	Damon (USA)	17 3/4	17 1/2	-1/4
34 1/4	14 3/4	Enzo-Biochem (USA)	23	16 3/4	-6 1/4
18 7/8	6 3/4	Flow General (USA)	8 3/4	7 3/4	-1
49 3/4	25 7/8	Genentech (USA)	37 1/4	33 1/2	-3 3/4
17 3/4	6 1/2	Genetic Systems (USA)	8 3/8	6 7/8	-1 1/2
23 1/4	12 1/2	Genex (USA)	13 1/2	13	-1/2
31	14 1/2	Hybritech (USA)	21	14 3/4	-6 1/4
22 1/4	10	Molecular Genetics (USA)	14 1/2	13 1/4	-1 1/4
23 1/4	10 1/2	Monoclonal Antibodies (USA)	12 1/2	11	-1 1/2
73 1/2	42	Novo Industri A/S (Denmark)	55 1/8	52 1/4	-3 1/8
30 1/4	13 1/8	Pharmacia (Sweden)	18 7/8	16 3/4	-2 1/8

For over-the-counter stocks, bid price is quoted; for stocks on the American and New York exchanges, the transaction price. *Nature's* weighted index of biotechnology stocks stood at 163 on 28 February, compared with 181 a month earlier. Data from E.F. Hutton, Inc.