

June, 1987

RAFI COMMUNIQUE

RURAL ADVANCEMENT FUND INTERNATIONAL

ANIMAL PATENTS

ISSUE: Patents on new forms of animal life proposed by U.S. government

IMPACT: Ownership and control of new livestock breeds will become concentrated in hands of biotechnology companies, result in higher costs for farmers and encourage genetic uniformity in animal breeds.

COUNTRIES AFFECTED: The proposal is specific to the United States, but sets a precedent for the future direction of patent laws in Europe and elsewhere.

WHEN: Proposed ruling issued by the U.S. Patent and Trademark Office in April, 1987. Farmer organizations, environmentalists, animal welfare groups and churches have formed a coalition to oppose animal patenting in the United States.

On April 17, the U.S. Patent and Trademark Office announced its intention to allow the patenting of new forms of animal life. While the ruling obviously applies only to the United States, its impact will certainly be felt around the world as other nations formulate their own policies.

The Patent Office ruling would allow for the patenting of animals not found in nature. This means that new animals and new breeds not now existing would be patentable. Only animals produced through the new biotechnologies would be considered a "human invention" and be patentable. The Patent Office stopped short of allowing the patenting of humans, but an official acknowledged that the decision could lead to the patenting of human traits and that this would be considered.

Animal patenting raises most of the questions and concerns posed by plant patenting. Based on our study of the effects of plant patenting, we would expect animal patenting to:

1. Facilitate greater concentration in the animal breeding industry and shift the economic power away from traditional breeders to corporations involved in biotechnology.

- 2. Increase the price of farm livestock.
- 3. Ultimately result in more genetic uniformity as patented "super breeders" come to dominate the marketplace.
- 4. Stifle the free flow of information among scientists who will now be encouraged to compete rather than cooperate with each other.
- 5. Shift public research priorities towards more basic research, leaving companies to pursue the more profitable "finishing" work.

MORE QUESTIONS THAN ANSWERS

With patented seeds (patented under the Plant Variety Protection Act--known elsewhere as "plant breeders rights"), a farmer is allowed to sow the patented seed, grow the crop and sell the harvested seed or keep the seed to be used the next year as seed. The farmer, however, cannot sell his/her crop to another farmer for use as seed. [William Lesser of Cornell University believes that for crop varieties patented under the regular patent statutes (as is being proposed with animals), it will be illegal for farmers to save their own seeds for their own personal use. Lesser states that farmers "must overcome a psychological resistance to having the uses of their crop dictated by the legal system."]

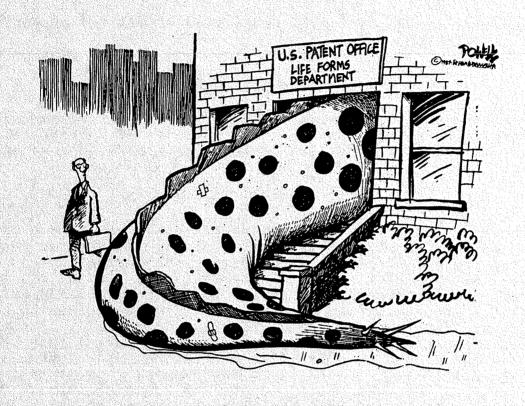
The Patent Office ruling resulted from an appeal of an application for a patent for an oyster originally denied by the government. The patent attorney for the researchers noted that the new ruling "means you have the right to exclude others from making and selling your product." If this is true, will a livestock farmer be able to sell the offspring of patented parents to another farmer as breeding stock? Almost certainly not. Will farmers even be able legally to breed their patented animals and use them themselves? Or will farmers in the future be forced to lease their animals from a patent-holder, futher reducing the farmers' control on the farm?

OPPOSITION ORGANIZES

Based on its long-standing opposition to plant patenting, the Rural Advancement Fund International has announced that it will participate in and help build a coalition to oppose animal patenting. Within days after the Patent Office ruling, animal welfare, farm, environmental and church groups with combined memberships of over five million people announced the formation of this coalition.

On June 11, a hearing was held by the House of

Representatives Judiciary Subcommittee on Courts, Civil Liberties and Justice. The U.S. Senate has passed a bill which would effectively slap a moratorium on animal patenting by cutting off funding to the Patent Office for the processing of these applications. (This bill would have to be passed by the House and signed by the President to become law.)



COMMUNIQUE UPDATES

Update on "Biotechnology and Natural Sweeteners" (see RAFI Communique, February, 1987). Johnson & Johnson (New Jersey, USA) and Tate & Lyle (a major producer of refined sugar based in Berkshire, United Kingdom) have jointly developed a new, non-caloric sweetener called "sucralose", which is 600 times sweeter than sugar. Johnson & Johnson is now seeking approval from the U.S. Food and Drug Administration to market sucralose in the United States. Tate & Lyle has patented the enzymatic process which is used to produce the sweetener. According to Bioprocessing Technology (March, 1987) sucralose is a chlorinated derivative of sucrose which is produced using enzyme technology.

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Spanish translations of three past issues of $\overline{\text{RAFI}}$ Communique are now available:

"Hormona de Crecimiento Bovino" - Octubre/Noviembre 1987

"La Biotecnologia y los Edulcorantes Naturales" - Febrero, 1987

"La Vainilla y la Biotecnologia" - Enero, 1987

Special thanks to Camila Montecinos of CET for preparing these translations.

NEWS BRIEFS AND UPDATES

The Parliamentary Commission of West Germany has recommended a five-year moratorium on the release of genetically engineered micro-organisms containing foreign genetic material.

In February, 1985, we reported that the U.S. government with help from Canada, Mexico, IICA and FAO, had slaughtered every hog they could find in Haiti to prevent the further spread of African Swine Fever (ASF). We lamented the demise adapted, native breeds so important to the impoverished rural population and speculated that the new ASF-free breeds to be introduced from the U.S. would not stand up as well. Indeed. report issued last month by World Hunger Year claims that the introduced hogs need facilities with concrete floors running water. But, according to the report, "two-thirds of all Haitians do not have access to running water for themselves..." Thus, only the rich can afford to raise the new animals. The report also charges that Haitians were not properly compensated for hogs killed in the ASF-eradication program. And it observes that the program effectively transformed a major source of income and security for rural poor into an export and market oriented business for the well-to-do. With the loss of the native stocks, however, no return to the previous situation (with native hogs adapted to the environment and society) seems possible.

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We note with interest that in a recent advertisement for an "in vitro conservation officer" in Biotechnology, the International Board for Plant Genetic Resources (IBPGR) identifies itself as the IBPGR "of the Consultative Group on International Agricultural Research." True enough. But where does the UN's Food and Agriculture Organization come in? Perhaps we'll find out at the next FAO conference in November.

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