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AGRICULTURAL RESEARCH

Windfall Breeds Fresh But **Vulnerable Crop of Grants**

The turn of the century has brought some belated holiday cheer for agricultural scientists: a new pile of money for research. Last week, U.S. Department of Agriculture (USDA) Secretary Dan Glickman unveiled a program that will double the agency's spending on peer-reviewed grants-providing an additional \$120 million-for work on everything from deciphering the genomes of prize heifers to making automobile fuel from crops. "We're ecstatic," says Terry Nipp, a lobbyist for land-grant universities. There's a chance, however, that Congress will wipe out the funds and turn the community's newfound joy to grief.

Called the Initiative for Future Agriculture and Food Systems, the new program first appeared in a 1998 law crafted by the Senate agriculture committee. The panel's chair, Richard Lugar (R-IN), has argued that ag research needs a big boost if the world is to feed its growing population. Lugar came up with an unusual-and controversial—source of funding for the initiative, authorized at \$600 million over 5 years: cash returned by the states each year to the U.S. Treasury in savings in the food stamp program. Angered by this end-run around the usual budget review process, House appropriators in 1998 insisted on barring any spending on the new program (Science, 16 October 1998, p. 392).

USDA can resurrect the program now because the law tying their hands expired last October, while the authorizing legislation had made the money available in 2-year pots. That means the initiative has until 1 October 2000, the end of this fiscal year, to blow its wad of unspent 1999 funds—if the wad isn't taken away. After Congress convenes later this month, House appropriators may try to put the kibosh on the program before the first grants go out the door.

The new program is meant to complement USDA's existing competitive grants program, the National Research Initiative (NRI), which also plans to spend about \$120 million on ag research in 2000. Unlike NRI, which funds mostly basic research, the new initiative will have an applied edge. The law tags five areas for support: sequencing and analyzing genes of livestock, crops, and useful microbes, and assessing the risk of altered organisms; managing natural resources and pests; food



Bumper crop? New research initiative will support such work as creating an oat-corn hybrid (right) as a tool for mapping the corn genome.

safety and nutrition; improving the productivity of small- and medium-sized farms; and developing new products, such as biofuels from corn or soybeans.

USDA has tentatively divvied up the money in that order of priority, with genomics—perhaps the hottest area in plant research now (see p. 412)—getting the lion's share. Specific areas that could find funding, experts say, might be studying whether altered plants could transfer foreign genes to weeds, for example, or adding bioinformatics training to a genomics project. "But [spending] will be largely driven by the proposals we receive," says Eileen Kennedy, USDA deputy undersecretary for research, education, and economics.

Wasting no time, USDA expects to issue a request for proposals next month. Ag researchers should renew friendships with colleagues in other departments and at other universities as soon as they can: Invoking grantmaking watchwords now in vogue, USDA says the proposals must be multidisciplinary and multi-institutional and have a clear connection to stakeholders, says Chuck Laughlin, administrator of the agency's Cooperative State Research, Education, and Extension Service. To help scientists reach out to their communities while draft-

> ing proposals, USDA plans to hold several workshops in March at which researchers can brainstorm with farmers about their needs.

> There's a "great need" for this kind of program, says plant biochemist Bob Buchanan of the University of California, Berkeley. He says it might support work that "falls through the cracks" between agencies, such as his own group's clinical testing of milk treated with an enzyme so it doesn't cause allergies. "It's hard to get anybody to pay for that," he says.

> Muting the celebration, however, is the prospect that Congress may seek to stop the program. A House agricultural appropriations subcommittee staffer says his panel is opposed to funding research without its approval. "The subcommittee does not like the process to be circumvented," he says. Kennedy, however, feels that the program-which has strong Senate support-is safe. "We would not go forward with this if it were thought that there wasn't a good chance that the money will be there," she says.

More doubtful is the program's longevity. The 2000 budget law bars funding the initiative, which could spell death for it after the borrowed time—and borrowed 1999 dollars-run out. "We may be looking at a 1-year opportunity," says Laughlin. Another worry is that appropriators may exact revenge by cutting NRI funds. "It's the ageold problem. Is it new money or is it coming out of somebody's hide?" asks Duke 5 University's Jim Siedow, speaking for the American Society of Plant Physiologists. If the NRI does feel the blade, he says, "I don't think I'd be too enthusiastic." But if \(\subseteq \) ag scientists are lucky, Congress budget \(\frac{\pi}{2} \) hawks won't play the Grinch—at least not -JOCELYN KAISER this year, that is.