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Agricultural Research

Solving Problems for the Growing World

Cover: A canal near Maricopa, Arizona. ARS scientists have devised software to automatically control canal gates, giving managers better control and flexibility and providing better water-use efficiency for surface-irrigation systems. Story begins on page 8. Photo by Stephen Ausmus. (D1301-4)

IN THE NEXT ISSUE

SPOTTING MICROCRACKS IN EGGS—Tiny cracks in an egg's shell are known as "microcracks." They're so small that they often escape detection by human inspectors. Over time, they get bigger, opening the door to bacterial contamination of the egg. Fortunately, ARS researchers have designed and built a device that helps spot those hard-to-see cracks, and it does so with nearly 100-percent accuracy.

USING DDGS FROM ETHANOL—In the Midwest each year, ethanol producers generate 10 million tons of byproducts known as "DDGS." High in protein, they're commonly used as feed supplements for livestock. To make the best use of DDGS, ARS researchers are testing their effects on animal growth and health and looking at their potential uses as human food supplements and nutraceuticals.

FARM-FRESH SEAFOOD—Many advances have been made in the farming of freshwater fish, like catfish and trout. The same can't be said for saltwater fish—at least not yet. But ARS aquaculturists are researching the best ways to raise saltwater superstars such as cobia and pompano in tanks, using recirculated water. They've already found that pompano can be raised in water that's far less salty than seawater.