Agriculture Secretary Tom Vilsack has revived the Advisory Committee on Biotechnology and 21st Century Agriculture and given members the task of finding a way to compensate farmers who suffer economic losses due to commingling of biotech and conventional crops (see FCN Sept. 2, 2011, Page 1). Val Giddings, a long-time advocate of agricultural biotechnology, thinks the notion of compensating organic farmers for alleged "contamination" of their crops is sheer nonsense. As usual, the views of this column's author are not necessarily those of our publication. – S. Clapp

Flowers and Pollen and Genes, Oh, My!

By L. Val Giddings

Last month USDA and the University of California, Davis, jointly hosted a meeting headlined "The Science of Gene Flow in Agriculture and its Role in Coexistence."

The meeting originated with Agriculture Secretary Tom Vilsack, who last December proposed compensating organic growers who claim that their crops are being "contaminated" with genes from biotech crops. This compensation fund would be underwritten by farmers growing safe, legal, environmentally superior and less-expensive biotech crops, and it would eventually be paid for at the supermarket checkout counter by non-organic food consumers (i.e., almost all of us).

I sympathize with Secretary Vilsack's desire to escape from the corner into which he's painted himself, but the issue is rich with more surprising and mind boggling twists than is usual, even in the weird alternate universe of Washington politics. So let's have a closer look.

But, first, let's clear the air. Does any of this involve safety? Do organic harvests that get commingled with biotech material present a greater risk to consumers? Do organically grown plants pollinated by biotech crops produce harvests that are less safe than they would otherwise be? And, make no mistake about it, simple measures can reduce such commingling, or "adventitious presence," to remarkably low levels, but it isn't realistic to expect them to reach zero.

So what of the safety issue? Do biotech crops pose any threat we need to worry about?

Organic advocates make great use of smoke, mirrors and energetic dancing around on these matters, but the answer is no. Crops produced through biotechnology have been subjected to more scrutiny, in advance, in depth and detail than any other foods in the history of humanity.

Indeed, whenever data have shown any safety differential between biotech and organic foods, we've found biotech-derived foods to be safer. Don't argue with me; just look at the data. Even the European authorities agree (*http://ec.europa.eu/research/biosociety/pdf/a_decade_of_eu-funded_gmo_research.pdf*).

So why the fuss?

It's usually not a bad idea to look to science to inform policy. Indeed, President Obama made a point of stressing that his administration would abjure the contempt and willful blindness to science that he felt had been hallmarks of his predecessor's handling of heartfelt issues, such as stem cell research. After all, facts are facts, and they don't change depending on who's in power.

But a funny thing often happens on the way to the forum. Somehow, facts occasionally manage to get crosswise with ideology. That's when the ironies start to accumulate like barnacles on the hull of the ship of state.

How widespread is "contamination"?

The idea of a "compensation fund" for organic growers is rooted in the allegation that organic growers have difficulty getting the organic price premiums for their produce if any material of biotech origin happens to be somehow commingled. There don't seem to be many good data out there to show that this is a widespread problem (strongly suggesting, in fact, that it's not), although one can find an anecdote here or there if you dig long enough.

The claim of "injury" deserving of compensation, however, raises several questions. We know that organic farmers are prohibited from knowingly using biotech seed in their plantings, but do they lose their USDA organic certification if the seed they plant contains 1%, 2%, 5% or even 50% biotech seed? Do they lose their certification if they grow a crop that contains pollen from biotech varieties grown on a neighbor's farm? Will organic growers lose their certification if bees pollinating their harvests have, God forbid, visited biotech crops before making a beeline to the organic fields?

All these questions have the same answer: *No*.

Miles McEvoy, who administers the National Organic Program, said in a policy memo in April: "As long as an organic operation has not used excluded methods and takes reasonable steps to avoid contact with the products of excluded methods as detailed in their approved organic system plan, the unintentional presence of the products of excluded methods should not affect the status of the organic operation or its organic products."

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Where is the injury?

So, where is the injury? What is the damage that "deserves" to be compensated, and how did it come to pass?

Well, apparently, according to the claims from some organic advocates, some growers have (voluntarily) entered into contracts with buyers stipulating the product they would provide is 100% free of any commingled material from a biotech source. As reported in these pages, Mark Lipson, who works in Secretary Vilsack's office, noted that organic farmers face stricter conditions in the marketplace for transgenic contamination than is required by either domestic or foreign regulations. He stressed "a crucial need for seed purity, a more effective GE stewardship system, real-world risk assessment and better predictive models of gene flow."

Organic growers, Lipson said, are threatened with a downhill progression of losses: first, premiums for their crops, then their customers, then whole market segments and, finally, consumer confidence (see *FCN* Sept. 9, 2011, Page 5).

The last time we saw such doctrinaire obsession with genetic purity, in the last century, the results for all were most unhappy. But let's see if we've got this straight: The grower of a specialty, identity-preserved product (organic) promises a customer a product with specific characteristics, something beyond what the relevant regulations stipulate and which consumers won't be aware of (therefore, not losing their confidence).

The specialty grower thus, on his/her own initiative, incurs higher costs and an increased risk to his/her ability to command the premium price if the stipulated product identity (100% biotech-free) isn't met. And this grower then seeks, in violation of long-standing and widespread practice, to shift his/her costs of production for this specialty product onto the shoulders of neighbors growing products that are not only legal, but also most likely superior in quality and certainly lower in environmental impact.

And, of course, the result of this policy, if it were to be put into place, would mean that average working Americans who buy non-organic food at affordable prices will pay higher prices in order to subsidize higher-income Americans buying preferentially subsidized organic food.

This is the point where reasonable people might be forgiven for sputtering in outraged disbelief. It all *might* make perfect sense … if you've eaten enough of the right (or maybe the wrong) kind of mushroom before contemplating it. This certainly sounds to me like a class of producers who *deserve* to lose consumer confidence, if not whole market segments, customers and premiums of dubious value. I'm reminded of the fabled child who murdered his parents and then threw himself on the mercy of the judge because he was an orphan.

We owe Mr. Lipson thanks for placing in stark relief what is actually going on here; this isn't about safety, consumer choice, or coexistence. Indeed, coexistence between GE and conventional crops can be achieved through simple rules that take into account the synchronicity of flowering and distance between fields.

No, this is just another special interest group pleading for government protection to preserve its preferential access to artificially distorted markets. In the real world, Brazil is now approving new biotech crops faster than the United States. After two decades of experience, we have shown our initial reservations about the safety of biotech crops to be not only unfounded but thoroughly contradicted by vast experience. This plea is, quite literally, unhinged from reality.

Given candidate Obama's pledge to respect science in regulatory decision making, and Secretary Vilsack's experience as governor of Iowa, a state heavily planted with biotech crops, why is this foolishness being countenanced?

It is worth quoting one of the founding pillars of modern environmentalism. The recovering activist Stewart Brand recently wrote, "I daresay the environmental movement has done more harm with its opposition to genetic engineering than with any other thing we've been wrong about. … We've starved people, hindered science, hurt the natural environment and denied our own practitioners a crucial tool."

At a time when hunger and poverty are up and jobs are down, the last thing the Obama administration should do is distort markets to raise the price of food for most people, as this organic compensation scheme would do.

