My views on Benton Co. Ballot Measure 2-89

Steve Strauss
Who am I?

• Research: Genetics and biotechnology of forest and horticultural trees – 30 years
• Former director – OSU Outreach in Biotechnology program – 8 years
• Served on Oregon governor’s task force on biotech crops – 2014-15

• Though an OSU Distinguished Professor, I am speaking today as citizen, not as OSU official or representing an OSU position
Agenda

- Context
- Ballot measure
Context

• Nearly all crops highly genetically modified
  • Identified in one place, then highly modified and moved all over the world – not “natural communities”

• These genetic changes are the basis of agriculture and our civilization

• Current biotechnology is continuing this trend with additional tools
Context

- Strong scientific consensus that the method, and the crops in use today, are as safe as with conventionally produced crops
- But, we are still very much learning about how to manage them, regulate them, and promote coexistence among different agricultural systems
  - Much to learn, much to negotiate, much research to do
- Benton County and OSU should continue to lead, not retreat, from these challenges
My concerns with ballot measure

- **Not well written**: Wide-ranging but ambiguous on major elements
  - *What it says, not what might have been intended, will be law*
  - All research, all uses, all patents?
- **No exemptions**: Research or medical applications
- **High cost to county for lawsuits, enforcement**
  - Sets up independent regulations / legal rights that are in contradiction to Oregon and federal laws
    - State law passed in 2013 that banned local agricultural laws; violates Oregon right to farm law
    - Extensive federal regulation of GMOs by EPA, FDA, USDA
    - County must manage citizen lawsuits, control program
- **Harmful, uncompensated takings**
  - Will require farmers affected by the ban to rip up crops with no compensation for losses
  - Will require ongoing and future research into medical treatments, environmental protections, and agricultural sustainability that uses biotech methods to be abruptly stopped
- **Does not do what it says**: Does nothing to enhance our already vibrant local food system
OSU analysis of impacts

- “OSU estimates the measure might directly impact 120 or more faculty in eight OSU colleges;
- Stop research that was valued at $18.3 million from external funding in fiscal year 2014;
- Affect the education of 300-400 students; and
- Impact 100-200 support university staff.”
Multiple uses of GMOs in research and teaching at OSU

• Research and develop therapies for various human diseases, including Lou Gehrig’s disease;

• Finding new ways to prevent or treat some types of cancer, including skin, lung, ovarian, bone, and pancreatic cancers;

• Reduce or prevent the effects of agricultural diseases on Oregon crops, such as eastern filbert blight;
Multiple uses of GMOs at OSU

• Develop improved environmental clean-up methods, including methods to clean up oil spills;

• Improve bioenergy and wood crops;

• Research the safe use of products of genetic engineering;

• Identify endangered species in the wild and detect the unlawful sale of protected species, such as endangered whales; and

• Educate students on modern laboratory tools and procedures, such as DNA sequencing.
Other very worrisome elements

• “…makes arguments about the inherent rights of people to local and self-government that transcend state and federal law”
  • Radical political and legal action: Sure to be challenged
• “…establishes mechanisms for enforcement; rights of individuals, groups, or the county to sue for enforcement; and stipulates that violation of prohibitions are subject to both civil liability and criminal culpability.”
  • Back to the wild west? Can the county manage this?
• “…outlines a “Bill of Rights” for natural communities, foods and agriculture.”
  • Yet agricultural systems are anything but natural—how to put into practice and enforce?
Other very worrisome elements

• OSU: “It could also make it illegal for new crop varieties to be patented, and uncertainties would exist about the use of licensed or patented plants, whether or not they have been genetically modified or not.”

• Targets all kinds of biotech crops, yet with proper management they can have very large benefits
  • 2014 scientific analysis of 147 journal articles:
    • “..[biotech crop] adoption has reduced chemical pesticide use by 37%, increased crop yields by 22%, and increased farmer profits by 68%...” - Kupper and Quaim, PLOS One, 2014
  • Many new forms with consumer, environmental benefits here and coming – such as the “Innate” potato
    • Only potato DNA
    • Less spoilage and waste, healthier for people, and less pesticide use
Ballot measure sections

• Section 3. Statements of Law – Prohibitions Necessary to Secure the Bill of Rights
  • (b) It shall be unlawful for any corporation or governmental entity to engage in the use of genetically engineered organisms within Benton County
  • (d) It shall be unlawful for any corporation or governmental entity to require registration or patenting of open pollinated or traditionally-bred seed within Benton County

• Section 5. Enforcement
  • (c) Any action brought to remedy the violation of the rights of natural communities shall list the natural community as a plaintiff in the action; damages sought must bear a relationship to the damage inflicted upon the natural community, and awarded damages must be payable to the municipality for the restricted use of repairing the natural community to its condition prior to the violation
Ballot measure sections

• Section 8. Definitions

• (c) “Genetically Engineered Organism”: Any organism, organisms, or life forms, in which the genetic or self replicating material has been changed, engineered, modified or altered using techniques such as, but not limited to…[recombinant DNA]…

• (g) “Trans-genetic risk seed”: Any seed, or crop produced from that seed… that has been genetically modified or patented …

• (a) “Corporation”: Shall refer to any corporation, limited partnership, limited liability partnership, business trust, other business entity, or limited liability corporation organized under the laws of any State of the United States, or under the laws of any country.