Pew Initiative on Food and Biotechnology
Factsheet

February 2007

Since the 2001-2002 legislative session, the Pew Initiative on Food and Biotechnology (PIFB) has published a series of fact sheets summarizing state legislative efforts in the area of agricultural biotechnology (see PIFB fact sheets, June 2006, May 2005, May 2004 and June 2003.) This fact sheet updates a previous report on the 2005-2006 legislative session, to cover activity in the second half of the session. As the PIFB project will be coming to a close at the end of March 2007, this will be its final state legislative report.

State legislatures across the country reflect the debate about agricultural biotechnology to varying degrees, and they must continually balance a diverse set of interests. Some states, for example, are interested in capturing the perceived economic value of agricultural biotechnology for their agricultural producers, while weighing potential conflicts with existing conventional and organic producers. Other issues addressed by state legislators include regulation of genetically modified (GM) crops and food, protection of natural resources, labeling, and regulating provisions in agricultural contracts.

State Legislative Activity Related to Agricultural Biotechnology in 2005-2006

View the **Legislation Tracker 2005** or **Legislation Tracker 2006** database.

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1. Summary of the 2005-2006 Session

In the 2005-2006 legislative session, as measured by the number of bills introduced, state legislatures continued to be active in addressing a wide range of issues and challenges associated with agricultural biotechnology. State legislators introduced 134 bills in 33 different states and the District of Columbia in the two year session. This compares with the 170 separate bills introduced during the 2003-2004 session.

There was not a significant number of new bills introduced in 2006; typically, fewer bills are introduced in the second half of a two-year session. Bills that were introduced will be discussed below. Legislative trends in 2006 also were consistent with those reported for 2005.

In terms of new activity in 2006, a closely-watched proposal in Vermont ("the Farmer Protection Act"), was vetoed by the Governor. This bill was prompted by concerns about the unintended presence of GM crops in conventional and organic crops. There were two versions of the bill, the House version (HB 309) and the Senate version (SB 18). The Senate version, which was adopted by the conference committee, but ultimately vetoed by the Governor, would have held manufacturers strictly liable for damage caused by GM material (that is, liable without requiring a finding of negligence on the part of manufacturers), while the House version would have required that manufacturers be negligent to be held responsible.

In the 2005-2006 legislative session, the level of legislative activity remained high, but the types of issues addressed continued to evolve. States were engaged with a number of important issues identified in previous reports, such as resolving conflicts related to liability and contracts, but, in the 2005-2006 legislative session, there were significant new areas of legislative activity as well.

A new development emerged in 2005-2006 that focused on local law-making. Sixteen bills were introduced in 2005-2006 to preempt (disallow) local and county regulations on GM seeds and crops, and nine were enacted during that period (eight in 2005 and one in 2006 in Michigan, SB 777). One preemption bill died in 2006 before reaching a vote on the Senate floor (SB 1056, California) Preemption bills represented one of the largest areas of state legislative activity for the 2005-2006 session (12 percent of all introduced bills), and were the most significant legislative development in the 2005-2006 legislative session. Because these bills deal with the regulation of seeds and crops,

PIFB classifies them as bills to "regulate GMOs" (genetically modified organisms), an area that in 2005-2006 comprised the largest category of introduced bills (29%) and adopted bills (37%).

State action to preclude local and county regulation of GM crops was prompted by the concerns of some legislators that local regulations could be inconsistent with statewide policies and regulations. This realization came in the wake of passage of local and county regulations on GM crops that placed limitations on agricultural biotechnology, not exclusively but most notably in four California counties (Santa Cruz, Trinity, Marin, and Mendocino). In fact, the majority of ordinances proposed or enacted locally that dealt with this issue limited or prohibited the use of agricultural biotechnology. Preemption bills represented a substantial share of adopted state legislation on agricultural biotechnology in 2005-2006 (one third of all bills adopted), in comparison to 2003-2004, when they represented a minute share of adopted state legislation. States in the Northern Plains and Midwest were most active on state preemption legislation in 2005-2006 (56% of all introduced preemption bills), followed by the South (25%) and the West (19%).

In the 2005-2006 legislative session, state legislators also continued to propose legislation in support of agricultural biotechnology, the second most prominent category of bills in 2005-2006, both in terms of introduced bills (22%) and adopted bills (33%). By comparison, in 2003-2004, 34% of introduced bills supported biotechnology, and 57% of adopted bills supported biotechnology. These bills provided favorable tax treatment for investment, approved bond issues for laboratories and infrastructure, and created high-level commissions to promote the industry, among other things. As declared in the legislative findings of a number of the bills, many states view agricultural biotechnology as an engine for economic growth, and they are actively promoting the technology. Bills supportive of biotechnology combined with preemption bills, represent two-thirds of adopted bills in 2005-2006, indicating that adopted legislation in 2005-2006 was largely supportive of agricultural biotechnology.

In addition, some areas of legislative engagement that PIFB identified in prior fact sheets continued to make their presence felt in the agricultural biotechnology arena in 2005-2006. Managing the potential economic conflicts between farmers who use GM crop technologies and those using conventional or organic production approaches is still a major concern and was the third most active area for state legislators in 2005-2006. PIFB continues to characterize such bills in the category "liability and contracts," which comprised 15% of the bills introduced in 2005-2006 (almost the same percentage as in 2003-2004) and 11% of adopted legislation in 2005-2006, compared to 3% in 2003-2004. Finding ways to allow producers using different technologies to "peacefully coexist" was the subject of legislation in many areas of the country and represented a notable trend. Examples of "liability and contract" bills include resolutions in Hawaii intended to urge support for coexistence; bills in the Northern Plains/Midwest which would have established a liability regime for the introduction of genetically engineered wheat into the state; and legislation in Vermont (noted above) that would have made manufacturers strictly liable (without requiring negligence) for damage caused by genetically engineered seeds and plant parts - prompted by concerns about unintended presence of GM crops in conventional and organic crops.

The remaining introduced bills in the 2005-2006 legislative session touched on a variety of areas. For example, 16% of introduced bills in 2005-2006 sought to impose moratoria on GM crops and animals (compared to 6% in 2003-2004); 8% proposed to impose labeling requirements (compared to 7%); 9% involved studies and taskforces (compared to 19%); and 1% concerned crop destruction (compared to a similarly small number in 2003-2004). For a more detailed discussion of methodology and category definitions, please see the last section of this fact sheet.

Overall, 27 bills and resolutions were adopted in 2005-2006 (20% of introduced bills), compared with 37 bills in 2003-2004 (22%) and 45 in 2001-2002 (28%).

Figure 1: Introduced Legislation, By Category, 2005-2006, 2003-2004, and 2001-2002

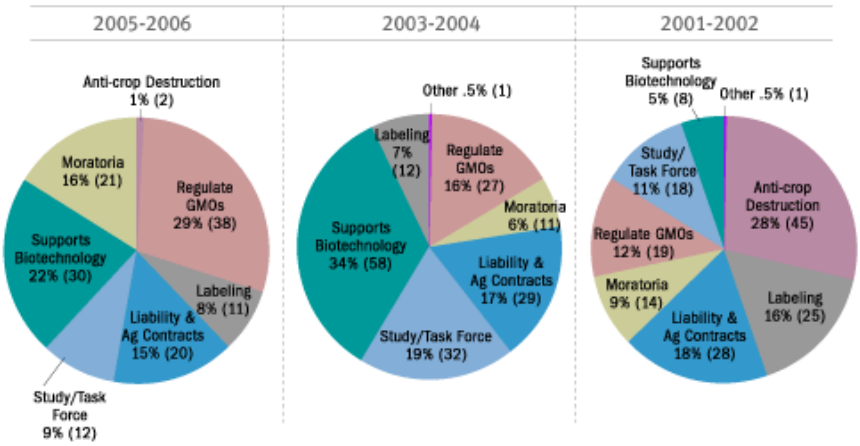
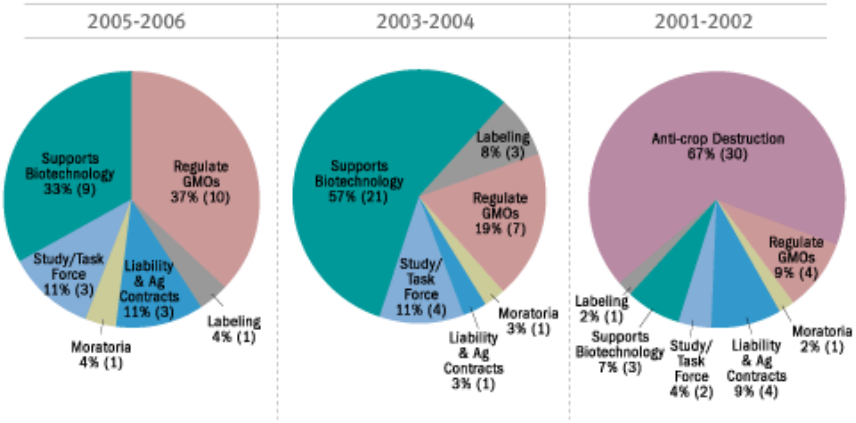


Figure 2: Adopted Legislation, by Category, 2005-2006, 2003-2004, and 2001-2002



2. Legislative Changes in 2006

Newly-introduced bills:

17 new bills were introduced in 2006, the second half of the 2005-2006 legislative session. These bills are described below:

One bill introduced in 2006 was adopted: HB 108, in Maryland, which extends a moratorium on aquaculture permits for raising transgenic or genetically altered species.

The following new bills were introduced in 2006 but not adopted:

HR 81, and HCR 110, in Hawaii, would have requested that the Department of Agriculture determine a method of gathering data on genetically-modified organism crop research projects in the state, including their locations.

HR 99, and HCR 134, in Hawaii, would have urged the Department of Agriculture to require full public disclosure when companies conduct open air testing of GM crops.

SB 2749, in Hawaii, would have provided a ten-year moratorium on testing, propagating, cultivating, growing, and raising genetically-engineered taro.

SB 2750, in Hawaii, would have provided a ten-year moratorium on testing, propagating, cultivating, growing, and raising genetically-engineered coffee.

SB 2751 and HB 3219, in Hawaii, would have provided a ten-year moratorium on testing, propagating, cultivating, growing, and raising, genetically-engineered coffee and taro.

SB 2752 and HB 3218, in Hawaii, would have required persons proposing to engage in testing, propagating, cultivating, and growing GMOs to notify the Department of Health and obtain a certification from the Department.

HB 2827, in Hawaii, would have prohibited the sale of genetically-modified fish or fish product in the state if not appropriately identified or labeled.

HB 2717, in Kansas, would have provided that before a variety of transgenic wheat seed could be offered for sale, the patent holder must provide written notification to the Secretary of Agriculture that includes information regarding handling protocols to ensure that the transgenic wheat variety does not enter foreign countries that have not approved the transgenic wheat for use, and a description of any pending state or federal level administrative reviews or legal actions.

HB 4733, in Massachusetts, would have authorized the Committee on Public Health to make an investigation and study of certain House documents concerning genetically-modified organisms.

SF-3575 and HF-3915, in Minnesota, would have provided a two-year moratorium on genetically-engineered wild rice in the event of an application for a new test plot, and would have required an assessment and reports during the moratorium.

SB 6625, in New York, would have required the labeling of genetically-modified seeds.

Adopted bills from carryover legislation in 2005:

Of the eighty-four bills that were still pending at the close of the first year of the 2005-2006 legislative session (see June 2006 Fact Sheet), six were ultimately adopted:

B-16-504, in Washington, DC, establishes a Technology Opportunity Development Taskforce to identify biotechnology and other fields that could provide economic development.

SR 129, in Hawaii, supports the efforts of the Hawaii Biotech Policy Forum to convene key stakeholders on the use of genetically engineered crops in Hawaii.

SB 1899, in Hawaii, appropriates funds to provide scientific information to allow genetically engineered rainbow papaya to be introduced into the Japanese market.

LD 248, in Maine, provides funding for dues for the International Northeast Biotechnology Corridor.

SB 777, in Michigan, preempts local regulations on the labeling, sale, storage, transportation, distribution, use, and planting of agricultural, vegetable, flower, or forest tree seeds.

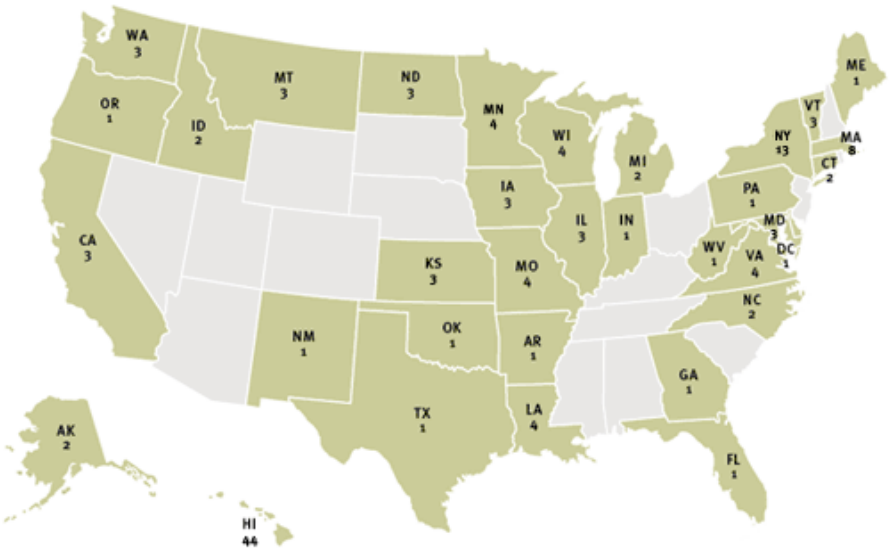
HB 2640, in Washington, creates biotechnology product and medical device manufacturing tax incentives.

3. Regional/State Activity

Regionally, 34% of introduced bills in the 2005-2006 session were from Hawaii (once again the leader with 44 introduced bills in 2005-2006 [38 in 2003-2004]); 22% were from the Northern Plains/Midwest; 21% were from the Northeast; 15% were from the South; 7%

were from the West; and 1% were from Alaska. Other individual states continuing to introduce large numbers of bills were New York (13 in 2005-2006 – compared to 12 in 2003-2004), and Massachusetts (8 in 2005-2006, and 9 in 2003-2004). (View legislative activity in all states.)

Figure 3: Legislation Related to Agricultural Biotechnology, 2005-2006



Note: The numbers inside each state indicate the numbers of pieces of legislation introduced during the 2005-2006 calendar year within that state.

4. Bills by Category

Anti-Crop Destruction

In the 2005-2006 legislative session, two bills were introduced regarding Anti-Crop Destruction: HB 1082 (HI), which would have established an interagency agricultural crime abatement taskforce, and HB 1774 (MA), which would have enacted measures to protect against crop destruction. Neither bill was enacted into law. The relatively low level of activity in 2005-2006 compared to other sessions suggests that the issue has been generally resolved by state legislatures through prior legislative enactments.

Regulate GMOs

Bills preempting (disallowing) local regulations regarding the advertising, labeling, distribution, sale, transportation, storage, or use of GM crops or seeds were the most notable legislative development of 2005-2006, and they made up almost half of all bills introduced in the category "regulate GMOs." In 2005-2006, there was substantial activity in the preemption area: state legislatures adopted nine preemption bills out of sixteen introduced - five in the Northern Plains/Midwest (HF 642 (IA), SB 777 (MI)(was enacted in the second half of the 2005-2006 session), HB 1302 (IN), SB 2277 (ND) and HB 2341 (KS); one in the West (HB 401 (ID); and three in the South (SB 87 (GA), SB 580 (WV) and HB 1471 (OK)).

The remaining seven preemption bills died, were withdrawn, or were vetoed: HF 202 (IA) (died); SF 259 (IA) (withdrawn in favor of HF 642, which was adopted); SB 1009 (MO) (died); HB 1842 (MO) (died); HB 38 (ID)(vetoed, but HB 401 was adopted); SB 1056 (CA) (did not come to a vote on the Senate floor at the end of the session in 2006, and so it died); HB 671 (NC)(died).

There was only one non-preemption regulation bill adopted in 2005-2006, SB 211 (MI), which prohibits the introduction of specified invasive fish, plant, or insect species, or genetically-engineered variants.

A number of pieces of legislation regulating GMOs failed to be enacted in 2005-2006, including the following bills:

In Hawaii, in the first half of the 2005-2006 legislative session, SR 121, SCR 213, HR 220 and HCR 295 would have requested coordination by state and county regulatory agencies with respect to the management of genetically modified organisms; SB 646 would have mandated that the state Department of Agriculture use the precautionary principle to anticipate, prevent, or minimize the adverse effects of biotechnology and genetic engineering; HB 1024 and SB 1857 would have required life sciences companies that operate as crop producers to make public disclosure of locations of crop fields and test sites of genetically modified crops and to specify the types of genetic tests conducted; and SB 1763, SB 1764, HB 1780, and HB 1781 would have established a permit to regulate the release of certain genetically engineered and genetically modified agriculturally-related organisms and establish a labeling and liability regime.

In the second half of the 2005-2006 legislative session, Hawaiian legislators introduced HR 99, and HCR 134, which would have urged the department of agriculture to require full public disclosure when companies conduct any open air testing on genetically-modified organisms, and SB 2752, and HB 3218, which would have required persons proposing to engage in testing, propagating, cultivating, and growing GMOs to notify the Department of Health and obtain a certification from the Department.

In Kansas, HB 2239 was introduced in the first half of the 2005-2006 session, and would have required state approvals before transgenic wheat seed could be offered for sale. In the second half of the session, Kansas legislators also introduced HB 2717, which would have provided that before a variety of transgenic wheat seed may be offered for sale, the patent holder must provide written notification to the secretary of agriculture that includes information regarding handling protocols to ensure that the transgenic wheat variety does not enter foreign countries that have not approved the transgenic wheat for use, as well as a description of any pending state or federal level administrative reviews or legal actions regarding the transgenic wheat variety.

In the Northeast, in the first half of the 2005-2006 legislative session, AB 115 (NY) and AB 8309 (NY) would have required the registration of GM seed; HB 490 (VT) would have required registration of seed labeled as organic to ensure that it is free of genetically-engineered materials; and SB 1239 (MA) would have established a biological agent registry to catalog deleterious "biological agents," including bioengineered constituents.

Labeling

In the 2005-2006 legislative session, states continued to introduce legislation in the area of labeling (11 bills, or 8% of introduced bills).

One labeling bill was adopted in 2005-2006: SB 25, Chapter 26 (Alaska), which requires that genetically-modified fish not be sold for human consumption unless it is conspicuously labeled.

The rest of the labeling bills were not adopted in the 2005-2006 legislative session:

In the first half of the 2005-2006 legislative session, Hawaii introduced legislation which would have prohibited an entity selling seeds to represent that they are free of GMO material, if the entity knows or should know otherwise (SB 647). In the second half of the 2005-2006 session, Hawaii also introduced HB 2827, which would have prohibited the sale of genetically-modified fish or fish product in the State if not appropriately identified or labeled.

In the Northern Plains/Midwest, HB 1353 (ND) was introduced in the first half of the 2005-

2006 session and would have required that organic seed be labeled with information specifying its transgenic content.

In the Northeast, in the first half of the 2005-2006 legislative session, SB 1637 (NY), HB 2667 (MA), and AB 3165 (NY) would have required the labeling of genetically-modified food and food products; AB 8344 (NY) would have required the labeling of genetically-modified seeds. In the second half of the 2005-2006 legislative session, New York introduced SB 6625, which would have required the labeling of genetically-modified seeds. In the West, New Mexico introduced a bill in the first half of the 2005-2006 session that would have required labels on food when the food has been genetically engineered (SB 906).

Liability and Ag Contracts

In the 2005-2006 legislative session, states were very much concerned with liability and contract issues, in an effort to mediate potential conflicts between agricultural production and marketing systems. In 2005-2006, liability and contract bills made up approximately 15% of the legislation introduced (20 bills).

Three bills were adopted in the 2005-2006 legislative session: SR 115, HR 194, and SCR 208, all from Hawaii, which were introduced in the first half of the 2005-2006 legislative session to urge support for coexistence among agricultural sectors, so biotech, conventional, and organic crops can grow in the same region. Bills on coexistence represented an interesting new development in the 2005-2006 legislative session that bears future monitoring. These legislative efforts demonstrate that this is an emerging issue about which consensus has not yet been reached.

Hawaii also had a number of proposals which died in the 2005-2006 legislative session, including bills introduced in the first half of the session that would have assigned liability for injury caused by genetically-modified organisms (SB 645, HB 1022, SB 1036); and SB 1037, a bill that would have required a biotech company that sells genetically-engineered organisms to provide written disclosure of possible risks.

In other regions of the country, a number of other liability and contracts bills were introduced but not adopted in 2005-2006:

In the Northern Plains and Midwest, SB 218 (MT) and SB 2235 (ND were introduced in the first half of the 2005-2006 legislative session and would have established liability for injury caused by the introduction of genetically engineered wheat into the state; HB 317 (MO) and HB 3786 (IL) would have established a regulatory mechanism for farmers who wish to retain seed from harvest of a patented-seed-crop; and HB 405 (MT), and HB 547 (MT) would have required that any GM wheat sold include specified instructions for its use.

In the Northeast, a closely-watched proposal in Vermont ("the Farmer Protection Act"), was vetoed by the Governor in 2006. The bill was prompted by concerns about unintended presence of GM crops in conventional and organic crops. There were two versions of the bill, the House version (HB 309) and the Senate version (SB 18). The Senate version, which was adopted by the conference committee but ultimately vetoed by the Governor, would have held manufacturers strictly liable for damage caused by GM materials (that is, liable without requiring a finding of negligence on the part of manufacturers), while the House version would have required that manufacturers be negligent to be held responsible.

Also in the Northeast, SB 267 (MA), would have held a manufacturer liable for damages caused by genetically-engineered food or seed products, unless the harm resulted from a violation of contractually-agreed upon safety precautions for the use of that product; AB 1468AB 1969 (NY) would have required sellers of GM plants or seeds to provide instructions for their use.

In the West, AB 984 (CA) was introduced in the first half of the 2005-2006 legislative session and would have imposed liability on a manufacturer for GMO contamination of a farm product, facility, producer, grain and seed cleaner, handler, or processor.

Study or Task Force

This category made up almost one tenth (12 bills) of the legislation introduced in 2005-2006, and almost one tenth (3 bills) of the legislation adopted.

Introduced and adopted bills in this area in 2005-2006 were predominantly from Hawaii, as Hawaiian state legislators sought to address a number of issues of significance to the islands' agricultural economy. In the first half of the two year session, Hawaii's legislators adopted bills (HR 108) and HCR 146) to request a study of bioprospecting, the practice of looking to native natural resources for new components for pharmaceutical and other products; adopted legislation (SR 129) to support the efforts of the Hawaii Biotech Policy Forum to convene key stakeholders on the use of genetically-engineered crops in Hawaii; and also introduced legislation, which was not enacted, to establish a temporary bioprospecting advisory commission (SB 484SCR 224 (similar to SR 129, above, which was adopted)); and assess the effects of genetic engineering in the state (HB 1683 and 1762).

In the second half of the 2005-2006 legislative session, Hawaiian legislators also introduced HR 81 and HCR 110, to request the Department of Agriculture to determine a method of gathering data on genetically-modified organism crop research projects in the state. The bills died at the end of session.

In the Northeast, New York introduced a bill in the first half of the 2005-2006 legislative session which would have required a study of the use and effects of genetically engineered plants and genetically-modified organisms (HB 870). The bill died in 2006. Massachusetts also unsuccessfully offered legislation in the second half of the 2005-2006 legislative session (HB 4733, which would have authorized the Committee on Public Health to make an investigation and study of certain House documents concerning genetically-modified organisms.

Support Biotechnology

As noted above, supporting biotechnology was a very active area in the 2005-2006 legislative session, as some states sought to provide incentives to promote biotechnology in its various forms. Bills to support biotechnology represented the biggest category of legislation after preemption in 2005-2006, comprising almost a quarter of introduced legislation (30 bills) and one third of adopted bills (9 bills).

A description of all bills supporting biotechnology is available through the legislation tracker. A summary of each bill can also be viewed through the following links: HB 6503 (CT); HB 6725 (CT); B16-504 (DC); HB 1683 (FL); SB 1899 (HI); SB 1365 (IL); SB 2688 (IL); SB 287 (LA); SB 294 (LA); HB 500 (LA); HB 872 (LA); HB 1484 (MA); HB 1485 (MA); HB 340 (MD); SB 620 (MD); LD 248 (ME); EO 13 (MO); SB 1054 (NC); HB 75 (PA); HB 159 (VA); HB 329 (VA); SB 646 (VA); HB 1801 (VA); HB 1870 (WA); HB 2640 (WA); SB 6462 (WA); AB 547 (WI); AB 606 (WI); SB 435 (WI); and SJR 52 (WI).

The following bills supporting biotechnology were adopted in 2005-2006:

In the Northern Plains/Midwest, the Governor of Missouri issued an executive order, EO 13, in the first year of the two-year session, to create an advisory council to further biotech.

In the Northeast, Pennsylvania enacted HB 75 in the first year of the two-year session, to include biotech within the scope of its Industrial Development Act to support biotech enterprises as a tool of industrial development; and Maine enacted LD 248 , in the second year of the two-year session, which provides funding for dues for the International Northeast Biotechnology Corridor.

In the West, Washington State enacted in the first year of the two-year session HB 2640 (WA), to create biotechnology product and medical device manufacturing tax incentives.

In the South, three bills were enacted in the first half of the two year session: HB 340 in Maryland, to provide funds for the Center for Advanced Research in Biotechnology at the

University of Maryland; and in Virginia, SB 646, to create the biotechnology commercialization loan fund, and HB 1801, to create a panel to make decisions in support of the State's biotechnology investments. One bill was enacted in the second half of the session, in Washington, DC: b16-504, link to bill #509 to establish a Technology Opportunity Development Task Force, to identify biotechnology. Nanotechnology, and other emerging technology fields that could provide economic development opportunities.

Hawaii adopted SB 1899 in the first half of the 2005-2006 session to appropriate funds to promote transgenic and non-transgenic Hawaiian papaya in Japan and future markets, including the European Union.

Moratoria on GM Crops

In the 2005-2006 legislative session, the category "Moratoria on GM Crops" was an active area (21 bills introduced, or 16% of bills). Although no moratorium bill was adopted in the first half of the two-year session, one moratorium bill was adopted in the second half, HB 108 (Maryland, 2006), which extended a moratorium on aquaculture permits for the raising of transgenic or genetically altered species.

Other bills introduced, but not adopted in 2005-2006, include the following:

In the first half of the 2005-2006 session, Hawaii introduced SB 649 and HB 975, which would have prohibited the planting of genetically-engineered crops in an open field, except in a controlled environment, and SB 644, which would have prohibited the growing of genetically-engineered pharmaceutical crops. In the second half of the session, Hawaiian legislators also introduced SB 2749, which would have provided a 10-year moratorium on testing, propagating, cultivating, growing, and raising genetically-engineered taro; SB 2750, which would have imposed a similar moratorium with respect to genetically-engineered coffee; andSB 2751 and HB 3219, which would have imposed a similar moratorium with respect to genetically-engineered coffee and taro.

In the Northern Plains/Midwest, Minnesota introduced HF 1382 and SF 1566, in the first half of the two-year session, which would have prohibited the release, planting, cultivation, harvest, and sale of genetically engineered wild rice. In the second half of the session, Minnesota introduced SF 3575 and HF 3915, which would have provided a two-year moratorium on genetically-engineered wild rice in the event of an application for a new test plot, and would have required an assessment and reports during the moratorium.

In the Northeast, Massachusetts introduced HB 4598 in the first half of the session, which would have prohibited growing pharmaceutical crops in open air fields or test plots. New York introduced bills in the first half of the session which would have imposed moratoria on the planting and growing of genetically-modified crops (AB 1715); and pharmaceutical or industrial crops (HB 8675); and which would have prohibited the sale of transgenic aquatic animals (SB 4345 and AB 4469).

In the South, SB 318 (Arkansas), introduced in the first half of the two-year session, would have prohibited the release, planting, cultivation, harvest, and sale of genetically engineered wild rice; and HB 876 (Texas), introduced in the first half of the two-year session, would have prohibited the production, transportation, or release of food, animal feed, crops, or livestock genetically engineered to contain or produce drugs, industrial chemicals, or other non-food materials.

In the West, AB 1428 (California), introduced in the first half of the two-year session, would have prohibited the commercial sale and transfer of cloned or genetically-modified pet animals; and SB 570 (Oregon), introduced in the first half of the session, would have prohibited growing, raising, or cultivating certain genetically-engineered plants, and would impose a civil penalty for a violation.

5. Conclusion

This fact sheet covers the 2005-2006 legislative session and updates a previous fact sheet released in June 2006. PIFB has tracked and reported on legislative developments in agricultural biotechnology since the 2001-2002 legislative session (see previous factsheets: June 2006, May 2005, May 2004 and June 2003). As the PIFB project will be ending in March 2007, this is the final state legislative report.

As the technology relating to agricultural biotechnology has continued to mature, PIFB has discerned shifts in legislative activity over the last number of years. For example, some types of bills, including those related to crop destruction, were prominent earlier, but they have become less prevalent as state legislatures have successfully addressed those issues. Other areas, such as regulation of biotech crops, continue to be well-represented. As a part of that continuing activity, additional new trends, such as bills preempting local crop and seed regulations, have prominently emerged. In addition, bills relating to liability and contracts continue to play an important role, including bills to promote coexistence of new crop technologies.

Activities during the 2005-2006 legislative session suggest that agricultural biotechnology will continue to be of interest to state legislatures, particularly with respect to concerns about marketing, economics, and liability – issues that historically have not been the focus of federal regulatory efforts.

The most significant development in the 2005-2006 legislative session was legislation preempting (disallowing) local ordinances. The 2005-2006 session was the first session that this issue has been a major one in state legislatures, and it bears close watching for future developments.

As discussed in this fact sheet, bills supporting agricultural biotechnology represented the second most significant finding in the 2005-2006 legislative session. This represents a continuation of a trend first noted in the 2003-2004 session.

This fact sheet also noted that, while prior issues such as liability and contracts continue to be in play, new, but related, issues such as coexistence have also come to the fore in the 2005-2006 legislative session. The emergence of coexistence as an issue of state concern is an important theme which may reflect the maturing of ag biotech issues. In addition to garnering state legislative attention, coexistence is currently a focus of a number of national working groups, including the USDA's Advisory Committee on Biotechnology and 21st Century Agriculture. The National Association of State Departments of Agriculture and PIFB also cosponsored a workshop on peaceful coexistence (see report).

Recent developments concerning the unintentional release of herbicide tolerant rice into commercial markets may also heighten awareness of issues of liability and contracts, as states seek to assess liability in these types of situations.

There is also activity occurring in the states that might generate legislative responses to developments. For example, a Hawaiian state court recently found the state lacked authority to regulate a certain type of "biopharmed" algae; at the same time, federal regulators had also declined to exercise regulatory authority in this area. In a separate case, a federal court found that the state of Hawaii had not complied with procedural requirements relating to the issuance of permits allowing biopharming. These occurrences suggest that states will continue to evolve strategies in response to new challenges.

In a broader context, and in a related development, some stakeholders may continue to seek to clarify the intersection of federal regulatory authority with state-level efforts, including questions of federal preemption, funding, technical assistance, and coordination. These issues may gain additional prominence as states continue to consider the broader existing regulatory framework and assess specific state responsibilities, and as they encounter situations where regulatory gaps appear to exist.

6. Notes

Study Methodology

PIFB has endeavored to capture all legislation that addressed agricultural biotechnology issues introduced in state legislatures in 2005-2006. In a number of cases, cited legislation may include agricultural biotechnology as one of several high technology industries. Consistent with past surveys, this fact sheet has classified state legislation into seven categories: (1) penalties for crop destruction; (2) regulation of GM crops or animals (which includes preemption bills); (3) labeling; (4) liability and agricultural contracts (which includes bills on coexistence); (5) studies or task forces; (6) support of biotechnology; (7) moratoria, and (8) other. Where possible, comparisons have been made to other legislative sessions to indicate trends.

Study Definitions

Agricultural biotechnology represents many things to many people. To some, the technology offers the promise of more efficient, and environmentally benign, agriculture, greater economic development at home, and food security worldwide. Others suggest it presents challenges to ensuring access to key export markets for commodity crops, cultivating organic and non-GM crops, and that it raises questions about food safety, consumer information, and environmental stewardship.

These and other issues are, not surprisingly, finding their way into the debates of state legislatures and onto the ballots through voter initiatives. Most of these concerns pertain to issues such as liability, economic development, market access and other areas related to agricultural biotechnology that are not generally the focus of federal regulatory efforts. But some state legislation has also addressed labeling and the safety of new products in areas much more commonly handled by federal agencies. Whether such state and local restrictions could create a patchwork of inconsistent regulatory requirements remains to be seen.

PIFB has annually tracked these trends using study categories first adopted in 2001, the first year it tracked state legislation on agricultural biotechnology. Those categories are briefly described below.

Anti-Crop Destruction

In the past few years, farms and research labs where GM food crops are grown have been vandalized, and legislation has been introduced to increase the penalties for people who willfully damage or destroy agricultural facilities or products.

Regulate GMOs

Another category of legislation regulates the sale and use of GM seeds and crops, for example, requiring GM seed manufacturers and providers to develop measures to ensure that GM seeds or crops do not become inadvertently mixed with non-GM counterparts. The category "Regulate GMOs" also includes bills on preemption, an increasingly significant class of bills. Some pieces of legislation are also included in the category "regulate GMOs" where a biotech-derived organism is incidentally regulated as part of a larger regulatory regime (e.g. SB 211, MI, 2005, invasive fish)(adopted).

Labeling

The FDA does not currently require that GM food products be labeled as such, unless the use of biotechnology has resulted in a significant change in the composition of the food or food product. For example, if a protein that might cause an allergic reaction (such as a protein taken from peanuts) was introduced to a crop that does not traditionally cause allergies (such as a potato), any food products derived from that GM potato would need to be labeled to indicate that it might contain peanut allergens. One category of legislation PIFB tracks ("labeling") calls for either the voluntary or mandatory labeling of all food products generated through biotechnology. Consistent with past years, bills on labeling of seed have been included in this category (rather than under liability and contracts), because the key

element of the legislation is labeling (e.g. HB 1353, ND, 2005)(died), which would have provided a regime for determining the transgenic content of organic seed and noting this information on the label; and SB 647, HI, 2005)(died), which would have prohibited an entity from representing that seed is free of GMO content, if the seller knows, or should know, otherwise.)

Liability and Agricultural Contracts

Another type of legislation requires certain standards in agricultural contracts between seed manufacturers and farmers/producers. The standards typically require the manufacturer to spell out any material risks faced by the farmer/producer, including risks arising from any environmental damage, failure to comply with federal and state laws, reuse of seeds (or seed by-products) sold for one-time use that violate intellectual property laws, and more. These pieces of legislation give farmers and producers the right to recoup financial losses incurred if the terms of the agreement were somehow violated or if the farmer/producer was confused about certain issues in the agreement.

These bills have been introduced in response to the increased use of agricultural biotechnology by U.S. farmers and the concern that farmers could face financial losses from possible impacts from biotechnology, such as the possible rejection of GM crops and lawsuits stemming from environmental damage caused by GM crops.

A few pieces of legislation have sought to give some indirect (and less obvious) protection to other players in the food system who could be affected by impacts, including seed companies seeking to protect their intellectual property in GM seeds from unauthorized uses and the owners of livestock that consume feed derived from GM crops.

In 2005-2006, PIFB included in this category four bills on coexistence (SR 115 (adopted), HR 194 (adopted), SCR 208 (adopted), and HCR 263 (not adopted)) – to promote the coexistence of biotech and other types of crops in the same region, since they deal with issues involving the interaction of agricultural biotechnology with the production and marketing of other types of crops.

Some bills contain aspects of multiple categories; for example, labeling and liability, but PIFB seeks to assign each bill to just one category. If a bill has a predominant liability component, PIFB will count the bill in the category liability and contracts. For example, SB 645, HI, 2005)(died), would have required a biotech company that sells genetically engineered organisms to provide written disclosure of possible risks, but also would provide that disclosure of these risks does not eliminate the company's potential liability in selling such products if damages occur. This bill has been classified as a "liability and contracts" bill and not as a "labeling" bill.

Study or Task Force

Another category of legislation attempts to establish studies to examine a range of issues concerning the impact agricultural biotechnology has on the economy, food safety, and the environment ("studies or task forces"). Some of the bills in this category are not specific to agricultural biotechnology but address agricultural biotechnology as part of a greater class of biotechnology bills.

Support Biotechnology

Another type of bill expresses support for biotechnology on the part of state legislatures ("support biotechnology"). As with the category "studies and taskforces," some of the bills in the category "support biotechnology" are not specific to agricultural biotechnology but address agricultural biotechnology as part of a greater class of biotechnology bills. It should also be noted that where taskforces or advisory groups are created for the express purpose of furthering biotech, PIFB has classified such bills under the category "support biotechnology" rather than under "study or taskforce" (e.g. B-16-504 (DC), 2005 Technology Opportunity Development Taskforce)(adopted); or EO 13 (MO), 2005), Governor's Advisory Council for Plant Biotechnology)(adopted).

Ban or Moratorium

Another type of legislation seeks to place a ban or moratorium on GM seeds, crops or animals, for a specific length of time (typically 2 to 5 years). Where a bill combines moratoria with regulation, PIFB will assign the bill to the category "moratoria" (e.g. SB 318, AR, 2005 (died)), which would have prohibited the growing, raising, or cultivation of pharmaceutical rice and would provide for the licensing of genetically engineered plants.