

WSSA Position Statements on Timely Issues

During the past several years, WSSA has become more proactive regarding a number of timely issues that impact either directly or indirectly on weed science and societal affairs. Notable among the activities of WSSA is the preparation of "position statements", which upon approval of the Executive Committee of WSSA are then presented by certain officers and other representatives of WSSA to appropriately targeted audiences within the Congress, USDA, EPA, and/or other agencies or branches of government. These efforts, traditionally highlighted by an annual visit to Washington, DC, have proved to be very beneficial for all parties concerned.

The five position statements developed for 1990, and alluded to by President Larry W. Mitich in the October issue of the WSSA Newsletter, are published below in their entirety as a matter of timely interest to all members of WSSA.

Editor

For further information, contact Dr. L. W. Mitich,
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May 8, 1990

1. WSSA POSITION STATEMENT ON CHANGES IN THE FEDERAL NOXIOUS WEED ACT

Executive Summary

The Federal Noxious Weed Act is designed to provide for the control, exclusion, and eradication of noxious weeds and to regulate their movement. It should serve as the first step in preventing the entry and spread of noxious weeds and promoting the eradication of established infestations; however, interpretations of the Act have created problems with enforcement and action alternatives as the federal and state levels.

WSSA recommends the following actions:

- USDA should pursue adequate and stable funding to implement the full range of weed control activities authorized by the Federal Noxious Weed Act.
- Revise and expand the definition of noxious weeds, contained in Section 2(c) of the Act, to include aquatic weed species.
- Establish a Noxious Weed Technical Advisory Group to evaluate candidate species, develop appropriate classification criteria for noxious weeds, and make recommendations essential to implement the Act.
- Grant emergency authority to the APHIS Administrator to prohibit the entry of foreign weeds which meet the definition of a federal noxious weed, but which have not been added formally to the list.
- Insert appropriate language into Section 4 of the Act to prohibit the intentional movement of federal noxious weeds across state lines except under permit.
- Outline a weed classification system that categorizes the status of federal noxious weeds.
- Delete the statement in Section 12 of the Act that exempts the regulation of shipments of agricultural and vegetable seeds.

SITUATION: Noxious weeds have a dramatic effect on American agriculture, rangelands, wetlands, and aquatic waterways. Weeds directly interfere with crop production and other activities of man. The estimated cost of weeds to U.S. agriculture alone exceeds \$10 billion per year. Agricultural producers in the U.S. now spend \$3.6 billion annually on chemical weed control and \$2.6 billion on culture, ecological, and biological control methods, and yet a 10% to 15% loss of the total market value of farm and forest products occurs. Estimates on the impact and cost to control aquatic weeds are not available in summarized form. However, specialists in that area estimate the costs to be \$50 million or greater annually. Florida estimates expenditures for control average as much as \$14 million per year. California currently spends over \$2 million annually in the hydrilla eradication program.

The introduction of noxious weed species coupled with the possibility of their dissemination to cropland and other areas represents a significant threat. As enacted, the Federal Noxious Weed Act of 1974 is designed to provide for the control, exclusion, and eradication of noxious weeds, and to regulate their interstate movement. As presently written, this act should serve as the initial step in preventing the entry of noxious weeds and as the mechanism to limit spread or to initiate eradication of established infestations.

PROBLEM: Since its enactment in 1975, the interpretation of the Federal Noxious Weed Law has created problems at federal and state levels. The entry of ser-rated tussock, a listed federal noxious weed, into the U.S. in 1988 demonstrates that this legislation is not being implemented effectively as originally intended.

Additionally, the Federal Noxious Weed Act stipulates that listed federal noxious weeds cannot be moved interstate without a permit. The act has been interpreted to indicate that restrictions apply only to movement of federal noxious weeds from areas quarantined under the act. Currently, there are no weeds quarantined under the act and USDA-APHIS has not restricted the interstate sale of federal noxious weeds as ornamentals. Consequently, several recommendations have been drafted, which, if implemented, would allow the law to be used as initially intended.

RECOMMENDATIONS: WSSA encouraged USDA to endorse the following recommendations for changes in the Act and interact with the Congress to facilitate introduction of these recommendations. It is also recommended that the USDA pursue adequate and stable funding in order that a full range of weed management activities be implemented as authorized in the Federal Noxious Weed Act.

1. Redefine the definition of noxious weed in Section 2 (C) and expand it to include aquatic weed species.
2. Establish a Noxious Weed Technical Advisory Group to evaluate candidate species, develop appropriate classification criteria for noxious weeds based on known or suspected risk to United States agriculture or waterways, and make other recommendations for carrying out the intent of the law.
3. Provide emergency authority to the Administrator of APHIS to prohibit the entry of foreign weeds that meet the definition of a Federal Noxious Weed whether or not they have been designated as such.
4. Insert appropriate language in Section 4 of the law to clearly prohibit intentional movement of federal noxious weeds across state lines except under permit.
5. Outline a weed classification system that will categorize the status of federal noxious weeds, which would allow regulatory officials to understand the status of an level of action being taken against specific weeds.
6. Delete the statement in Section 12 that exempts regulation of shipments of agricultural and vegetable seeds under the act.

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2. WSSA POSITION STATEMENT ON FOOD SAFETY

The Weed Science Society of America (WSSA) strongly believes that the United States food supply, which is the most highly regulated and monitored in the world, is also the safest food supply in the world. At the same time, the WSSA support reasonable measures to improve the quality and quantity of our food supply without seriously reducing availability or increasing cost to the consumer.

Agricultural chemicals, particularly herbicides, are valuable tools in production agriculture when properly used. Herbicide residues rarely have been detected in raw or processed foods, and when detected have nearly always been below the tolerance levels established by EPA.

Herbicides play a particularly important role in the concept of reduced tillage, which eliminates or significantly reduces the need for mechanical cultivation, thereby preventing heavy soil losses by erosion. By limiting weed infestations, herbicides conserve soil moisture and increase crop yields. Further, herbicides improve the quality of the raw agricultural commodity, increase efficiency of mechanical harvesting, and reduce farm machinery accidents by eliminating weed obstructions.

Accurately assessing the risks to man and the environment and then weighing the risks against the benefits of herbicide use is a most important challenge to Congress and our regulatory agencies. Communicating this process to the American public in language it can understand is the challenge to American agriculture.

For further information, contact Dr. L. W. Mitich, President, WSSA.

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3. WSSA POSITION STATEMENT ON SUPPORT FOR THE IR-4 PROJECT

Executive Summary

- WSSA recommends increased support for the IR-4 program. IR-4, a Federally sponsored agricultural research program, coordinates the efforts of scientists at state and federal experiment stations and laboratories in industry in collecting required herbicide performance and residue data for food crops, and efficacy data for non-food uses.
- When the FIFRA re-registration process is com-

pleted in 1997, an estimated 30% of currently registered pesticides will be removed. Herbicide use in minor crops will suffer the greatest losses. Many basic manufacturers will not generate the necessary data to support registration for fruits, vegetables, ornamentals, strawberries, tree plantations, and minor agricultural crops. Consequently, more projects will be referred to IR-4 whose laboratories are working at capacity already. Currently, there is a backlog of 1200 requests for new minor use clearances.

- WSSA recommends continued USDA funding for IR-4 by means of a line item in the budget through PL 87-106 Special Grant monies. WSSA also recommends a minimum final budget of \$12 million per year for IR-4.
- In order to obtain industry support for re-registration of specific pesticides for minor crops, a standard mechanism is needed to allow transfer of crop injury and efficacy liability to the growers who request such use.

For further information, contact Dr. L. W. Mitich, President, WSSA.

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SITUATION: The Weed Science Society of America (WSSA) and its five affiliated societies recognize that a safe and diverse food supply is of utmost importance. To produce this food supply economically in the United States, safe and effective herbicides are essential for minor acreage and specialty crop production. Increasing research costs and new FIFRA re-registration data requirements make it increasingly difficult for the chemical industry to justify registering products. Potential sales are limited and crop liability is high for minor-use crops. On the other hand, farmers and their communities get as much as a 100-fold return on the cost of herbicides used on many minor crops. Thus, there is a critical need to increase support for the IR-4 program, a Federally sponsored agricultural research program. IR-4 coordinates the efforts of scientists at state and federal experiment stations and laboratories throughout the nation in collecting required herbicide performance and residue data for food crops, and efficacy data for non-food uses.

PROBLEM: It is not profitable for agricultural chemical companies to register products for minor crops because of the low volumes of products used, and perhaps more importantly, the potential liability on high

value crops. It is estimated that the FIFRA re-registration process to be completed by 1997 will remove 30% of currently registered products. Herbicide use in minor crops will suffer the greatest losses. Consequently, production may be lost to foreign nations where control of pesticide use is less effective. Many basic manufacturers will not generate the necessary data to support existing minor uses. As a result, more projects are referred to IR-4 whose laboratories are working at capacity already. There is a current backlog of 1200 requests for new minor use clearances. In order to comply with EPA's revised "Good Laboratory Practices" (GLP) standards, research costs are expected to increase up to 50%. IR-4 currently has an annual budget of approximately \$2 million provided through the Cooperative State Research Service (CSRS). Although there was a recent budget increase, it is not adequate to meet the expanded need for registration and FIFRA mandated deadlines for reregistration. Additionally, IR-4 has not been able to fund research projects supporting the registration of biorational weed control tools.

RECOMMENDED ACTION:

1. Continue to provide USDA funding for IR-4 through a line item in the budget through PL 87-106 Special Grant monies. Request minimum final budget of \$12 million per year for IR-4.
2. State Agricultural Experiment Stations, the Agricultural Research Service, and the agricultural chemical industry shall continue to cooperate with and support the IR-4 Program.
3. Change EPA minor use policies to facilitate the registration of biorationals and pesticides on minor crops, thus reducing the number of projects requiring IR-4 action.
4. Develop standard means by which growers assume the liability for poor herbicide performance or crop injury when using products on limited acreage, minor use crops.

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4. WSSA POSITION STATEMENT SUSTAINABLE AGRICULTURE

Executive Summary

- WSSA supports the concept that Sustainable Agriculture must include the profitable production of abundant high-quality, reasonably-priced food and other agricultural products while maintaining or improving the natural resources, environmental quality, and human communities.
- WSSA encourages use of Integrated Pest Management and Best Management Practices in Sustainable Agriculture. Agricultural production systems must be based on sound science, and avoid any adverse environmental impact of all agricultural management practices, including weed management.
- WSSA recognizes that the responsible use of herbicides plays an essential role in effective weed management in most crop production systems.
- WSSA recommends increased funding for integrated weed management systems including chemical, cultural, biological, and mechanical approaches.
- In addition, WSSA recommends further research in biotechnology, biocontrol, genetic engineering, and crop/weed modeling to provide additional weed management systems. Few such commercially feasible options for effective weed management are available at this time.

For further information, contact Dr. L. W. Mitich, President, WSSA.

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SITUATION: Our present agricultural system provides the United States with an abundant, diversified, high-quality, reasonably priced food supply. However, agriculture is and always has been in a state of change where producers must overcome numerous constraints in crop production. A major biological constraint to crop production is weeds, with which the Weed Science Society of America (WSSA) has always been vitally concerned. To be sustainable, agriculture must be profitable; therefore, economical weed management will play a significant role in Sustainable Agriculture.

CONCERN: A wide diversity of definitions exists for Sustainable Agriculture. The WSSA supports the concept that Sustainable Agriculture must include the prof-

itable production of an abundant quantity of high-quality, reasonably priced food and other agricultural products while maintaining or improving natural resources and having minimal adverse impact on the environment. Since weeds are a major factor affecting efficient agricultural production, employment of efficient, economical, and environmentally-safe weed management systems will be necessary to maintain a viable Sustainable Agriculture. With less than 2% of the U.S. population working in production agriculture, a labor force is not available for labor intensive weed management practices. Thus, in order to maintain food production, options other than intensive use of labor will have to be explored.

RATIONALE: Agricultural production systems must be developed from technology based on sound science. Some weed management practices which are being emphasized include the use of crop and herbicide rotations, mechanical cultivation and other cultural practices, minimal herbicide use rates to control specific weeds, field history and field scouting to determine the need and choice of herbicides, biological control, and other production practices to maintain a profitable yield while protecting the environment and natural resources for future generations. Weed science has made tremendous contributions to agricultural productivity, particularly since the 1940s and the discovery of modern herbicides. In regard to weed management, agricultural productivity can be maintained or increased by the integration of weed management practices using information on weed biology, biological control, cultural control, tillage, and various implementation technologies. Sustainable agriculture must have a viable weed management system.

RECOMMENDED ACTION:

1. Encourage and support research on production, economic, environmental, and health impacts of various weed management systems and weed infestation levels.
2. Encourage and support research and user information systems on weed biology, including weed-crop competition, genetics of weed reproduction, weed seed and bud dormancy, and weed population dynamics. These data can be utilized to develop economic thresholds and management strategies.
3. Encourage and support both short-term and long-term research to determine and promote weed management systems which result in sustainable agricultural production systems.

4. Encourage and support activities which promote total cropping systems including Integrated Pest Management (IPM) and best management practices (BMP). Since crops, problems, cultural practices, and environmental impacts differ across geographic regions, these systems must be developed on local, regional, and national bases.
5. Promote legislation that encourages adoption of practices leading to a safer environment. Support government programs which encourage adoption of practices that result in efficient crop production and conservation of our natural resources and environment.

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WSSA POSITION STATEMENT ON WATER QUALITY

Executive Summary

- Research to protect water quality has a high priority within the WSSA and its affiliated societies.
- Low levels of some herbicides have been detected in ground water in some states. Many of these herbicide residues are due to accidental spills, misuse, or other point-sources.
- Most of the herbicides found in groundwater have been at concentrations much lower than health advisory levels set by EPA.
- It is imperative that weed scientists work closely with the herbicide users, and that these scientists participate in research, extension, and regulatory decisions to protect groundwater. They must be involved in education of users and the public on herbicide safety.

- WSSA applauds and encourages increased cooperation among EPA, USDA, USGS, SGS, State governments, and industry on water resource protection.
- EPA should continue to set Maximum Contaminant Levels for pesticides and national guidelines for regulations. Maximum Contaminant Levels are needed for each registered pesticide and should be set by EPA as soon as possible. But WSSA agrees with EPA's strategy, that detailed water quality enforcement should be left to the states.
- WSSA endorses the use of Good Laboratory Practices in water quality sampling and analysis to insure an accurate data base.

For further information, contact Dr. L. W. Mitich, President, WSSA.

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THE ISSUE Pesticides have been detected in groundwater in many of the states. Where found, most of these findings are due to accidental spills, misuse, or other point-source incidents at particular sites. However, normal, registered, agricultural uses of pesticides also appear to result in detection of some chemicals in vulnerable settings.

Most pesticides have been detected at concentrations much lower than health advisory levels. For many pesticides, however, health advisories and "maximum contaminant levels" (which set legal limits for concentrations of chemicals in water) have not been defined.

WSSA POSITION:

1. Research to prevent water quality degradation has been identified as the number one research priority of the WSSA. Research on the environmental impact of herbicides has always been a major thrust of our Society, and we believe this issue is one that can be solved by research and education.
2. We agree with EPA's Agrichemicals in Groundwater Strategy, that it is the end user of pesticides who is the key to groundwater pollution prevention. The scientists, educators, and extension agents within the Weed Science Society of America are the people who work most closely with the users of herbicides; we must be included in the development and implementation of solutions such as the altering of practices.
3. We applaud and encourage increased cooperation between USDA agencies, the states, and industry such as in the conservation planning and water

quality program now being undertaken by SCS, CSRS, and state Extension Services. This effort must also include EPA, state regulators, and industry.

4. We agree with the EPA strategy of leaving detailed groundwater protection and implementation to the states—providing the EPA continues to provide guidance and establishes *Maximum Contaminant Levels* for water. State governments are more familiar with local crops, soils, and water resources; however, the national standards are essential to avoid conflicting regulations.

RECOMMENDATIONS:

1. Maximum Contaminant Levels are needed for every registered pesticide and should be set by EPA as soon as possible.
2. Research to define and develop environmentally-

safe herbicide use must be supported.

3. End-user education and voluntary safe herbicide use (including avoidance of point-source accidents) will be effective only if the weed science community is involved at all levels.

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