



Via *Electronic Docket Submission* <http://www.regulations.gov> – December 5, 2025

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**RE: Comments from the Florida Fruit & Vegetable Association on the U.S. Fish and Wildlife Service's draft Biological Opinion for Atrazine and Simazine Herbicides.  
Docket Control Number EPA-HQ-OPP-2020-0514.**

Dear Ms. Blankenship and Mr. Aubrey:

This communiqué is being provided in response to the release of the draft Biological Opinions (BiOp) for the herbicides atrazine and simazine. The atrazine/simazine BiOp situations first presented themselves to us in the October 7, 2025 EPA memo posted by Anne Overstreet, Director of EPA's Re-evaluation Division. By means of this comment letter, it is our intention to relay to the Fish and Wildlife Service (FWS) and the EPA our support for an expeditious, positive decision on the atrazine and simazine BiOps, which will ensure that specialty crop farmers in Florida will have continued access to these important/necessary herbicidal products.

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The Florida Fruit & Vegetable Association (FFVA) is a private, non-profit agricultural cooperative whose mission is to enhance the business and competitive environment for producing fruits, vegetables, sugarcane and other crops by managing policy/regulatory issues and providing solutions and collective services for our members. FFVA is submitting these comments on behalf of our sugarcane, sweet corn, citrus and agronomic sod producer members who rely heavily on the weed management and economic benefits provided by these triazine herbicides. We appreciate and welcome the opportunity to supply input on the atrazine and simazine BiOps.

### **Florida Specialty Crops Defined**

Even though most of the agricultural commodities grown in Florida are often called “specialty” or “minor” crops, they largely contribute to the diverse and highly nutritious diets available for the local, state, regional, national and global populations (especially during the winter months when the rest of the United States, other than Florida, is dormant and not producing these items).

Specialty crops are the cornerstones of Florida’s agricultural industry and have been for many years with a documented impact of more than \$8.7 billion per year. Florida farmers grow more than 250 types of these specialty fruit and vegetable crops, typically beginning in October and continuing through the end of May. Each season the specific above-mentioned crops rely heavily on the triazine herbicides for successful weed management. In fact, for more than six decades, the triazine herbicides have provided effective, low-cost, broad spectrum, long-acting weed management for Florida farmers.

Florida ranks first nationally most years in the production for triazine-registered crops such as sugarcane, oranges and grapefruits, and second nationally in the production of triazine-registered crops such as fresh market sweet corn, tangerines, tangelos and agronomic turfgrass grown for commercial sod. Over the years, Florida typically ranks first in the U.S. for value of its citrus production, and third in the U.S. for value of its vegetable production. Florida also ranks seventh in the U.S. for agricultural exports, with more than \$4 billion worth of agriculture commodities shipped from Florida to other countries around the world each year.

Florida produces its vegetable and citrus crops (other than oranges) purely with the intention for distribution within the fresh market system. This demands the commodities are of top quality, are aesthetically perfect (100 percent blemish-free), and are completely free of other imperfections such as plant (weed) trash. This can be difficult to achieve, especially under Florida’s subtropical environmental parameters that are so conducive to germination and prolific growth of problematic weed populations that can get out of hand in rapid fashion if left unchecked.

## **Weeds in Florida**

Florida agriculture faces unique and complex weed management challenges because of its subtropical climate, diverse crops and cropping systems, influences that come about from invasive/exotic weed species, and ecological sensitivities. The state's subtropical conditions allow weeds to grow year-round. This increases the number of weed generations per year, making control more difficult. Florida also experiences frequent rainfall. This in turn promotes rapid germination and growth of many weed species. The state also has mild winters, so perennial weeds do not die back naturally, unlike in colder regions. Additionally, Florida deals with invasive and hard-to-control weeds such as Spanish needles, Palmer amaranth, nutsedge, vine weeds, and tropical signalgrass. These species are widespread in Florida and function as highly competitive weeds.

Florida farmers who grow the aforementioned crops depend upon simazine and atrazine, as they remain extremely effective and economical crop production tools even after repeated decades of use. These triazine herbicides are still some of the most essential, traditional, effective crop production tools available to manage various important broadleaf and vine weed pests. They consistently provide compelling benefits and do so during each production season. Because of their chemical makeup and activity, the triazines have an unparalleled importance. Simazine's and atrazine's spectrum of control is still superior in many situations to other available alternative herbicide products.

Florida's subtropical environmental parameters are highly conducive to weed proliferation. And unlike other areas within the U.S., because of our growing conditions, Florida experiences these weed management challenges all year long. Without availability of the triazine herbicides, weed organisms would overrun the citrus, sugarcane, sweet corn, and agronomic sod industries in the state. Extraordinary amounts of yield and plant losses would occur without having simazine/atrazine as components of overall weed management strategies in the production of these Florida-grown crops.

## **Simazine and Atrazine: Critical weed management tools for Florida growers**

Florida farmers who grow sugarcane, citrus, sweet corn, and agronomic sod all depend upon these extremely effective and economical triazine herbicide crop production tools for weed management. Most of Florida production acreage of these crops receives at least one application of a triazine herbicide during the growing season. These tools are especially important in the high organic matter content soils of the Everglades Agricultural Area south of Lake Okeechobee, and in the flatwoods citrus production areas of the state. As an Association, we have been actively engaged in the reregistration aspects of the triazine class of herbicides, particularly atrazine and simazine, for more than a decade.

FFVA has served as a point of contact for EPA and the Triazine Network as issues and concerns over these two herbicide active ingredients have risen. The triazines are the most researched herbicides in history and have a proven safety record in the field.

Over the years, atrazine and simazine have made great impacts on agriculture and world hunger by assisting in the development of new farming methods, providing greater farming and land use capabilities, and increasing crop yields. These triazine herbicides are registered in more than 80 countries and are responsible for saving billions of dollars each year.

The triazines are chlorotriazine photosynthesis inhibitor (Group 5) herbicides. They are widely used herbicides that are primarily used to control broad-leaved weeds, vines, and to a lesser degree annual grasses in various crops including citrus, sugarcane, sweet corn, and agronomic sod.

Atrazine's benefits and applicability in the sugarcane, sweet corn and agronomic sod sectors have been well documented previously in FFVA's previous comments to the various open atrazine dockets. Specific to simazine though, simazine is also a highly effective herbicide in managing broadleaf and vine weed growth in a variety of other agricultural and horticultural settings as well. In Florida, simazine plays a crucial role in the management of weeds in crops such as citrus, as citrus groves are particularly susceptible to competition from weeds, especially the broadleaf and vine-type weeds that simazine manages so effectively. These weed pests can significantly impact the citrus tree's growth and yield. By applying simazine, citrus farmers can effectively suppress the growth of unwanted broadleaved weeds and vines, ensuring healthier and more productive crops. In citrus grove settings, weed management is of utmost importance to safeguard the proper growth and development of the trees. Simazine helps prevent weed encroachment, ensuring that valuable resources such as nutrients, water, and sunlight are not monopolized by unwanted vegetation.

Simazine was the initial triazine herbicide that was developed by the Geigy Agricultural Chemicals, and it was first sold way back in the spring of 1956 for non-crop uses on railroad tracks and rights-of-way in Switzerland.

Simazine was also the first triazine herbicide registered and sold here in the United States as well. Registered in the U.S. on April 11, 1957, simazine was initially approved for total vegetation control in noncropland areas, including rights-of-way. In addition to the original European data requirements, the U.S. also required information on simazine metabolites and on the presence or fate of simazine residues in crops and soil. Based on these expanded data dossiers, simazine was approved by the U.S. Food and Drug Administration and the U.S. Department of Agriculture for use in corn in 1958.

Major uses added to the simazine label included sugarcane, southern turfgrass species for sod production, pineapple and strawberry (in 1961); orange, lemon, apple, sour cherry, macadamia nut, asparagus, perennial grass grown for seed, and alfalfa grown for seed (in 1962); blueberry and caneberry (in 1963); and grapefruit, lime, almond, artichoke, avocado, olive, peach, pear, plum, sweet cherry and walnut (in 1964). Use on pecan crops was added in 1973. A U.S. residue import tolerance for banana was granted in 1978, allowing simazine to be used for weed control on banana plantations in countries where it was approved. Lemons and grapes were added to the label in 1979, along with expanded geography for multiple other fruit and nut crops. The first uses for weed control in forests were added in 1977, followed in 1982 with turfgrass for fairways, lawns, and other grassy areas in the southern U.S. Simazine could also be considered the standard for weed management in nursery crops and Christmas tree production in the U.S. Like atrazine, simazine also has a broad spectrum of weed control in crops like corn and could be used on a wide range of other crops as well. Simazine's excellent broadleaf weed control when used preemergent has made it a product of choice for growers of citrus, other fruits, nuts and berries, for many decades.

Conversely, atrazine was originally approved for use in the U.S. in 1958. Florida farmers who grow sugarcane, sweet corn, and agronomic sod all depend upon this extremely effective and economical triazine crop production tool for broadleaf and grass weed management. In fact, atrazine remains one of the most essential, traditional, effective crop production tools available to manage various important broadleaf and grass weed pests. Like simazine, atrazine consistently provides compelling benefits and does so during each production season. Because of its chemical makeup and activity, atrazine has an unparalleled importance.

Simazine and atrazine have also been shown, historically, to have very low negative effects on non-target species in the field, as well as various natural enemies, endangered and threatened species, and beneficial pollinator species. Their broad-spectrum activity ensures effective control of numerous broadleaf, vine, and even grass weed pests, which reduces crop damage and increases overall yields. The triazine's versatility makes them a valuable tool for Florida farmers who face diverse weed challenges 12 months a year. Additionally, the residual effect of the triazines provides prolonged protection for treated crops, reducing the need for frequent or additional applications of other/additional herbicidal materials. This not only saves time and labor but also contributes to sustainable agricultural practices.

The triazine herbicides have an incredibly rich database of information regarding exposure and effects towards endangered species and critical habitats. Relating specifically to simazine and exposure incidences, according to the EPA Biological Evaluation for simazine, only three incidents related to simazine have been reported

involving terrestrial animals; two with an “unlikely” certainty index (i.e., evidence exists that a stressor other than exposure to this pesticide caused the incident, but that evidence is not conclusive), and one that was labeled “probable”. But even in that “probable” case, concentrations of simazine were well below concentrations studied in laboratory toxicity tests that resulted in no mortality in birds, and therefore EPA could not conclude that this mortality was attributable to simazine.

So what is the point from all of this? The point is that simazine and atrazine have already been used effectively in citrus, sugarcane, sweet corn, agronomic sod, and numerous other crops for more than six decades now. And even with more than six decades of use, the incidence data have proven that they do not present unreasonable risk from environmental or human health perspectives. Nor has simazine/atrazine presented unreasonable primary or secondary risk from the standpoint of endangered or threatened species exposure, or from impacts to critical habitats. History of use and the lack of incidence data prove this fact. Products such as the triazines have been shown to be effective and stable by both state and national regulatory authorities.

Although simazine was the first triazine to be developed and marketed in corn and other crops, the more versatile atrazine quickly became the standard herbicide in crops such as corn. Simazine, however, has remained very valuable and is important on citrus and other fruit and nut crops, forage crops, ornamentals, turf, and several other vegetable crops. A strong demand for simazine remains in some areas based on specific weed pressures. Simazine is manufactured and sold by several companies today in more than 25 countries around the world, with Brazil, the U.S., Australia, and Japan ranked as the top four.

The incorporation of the simazine and atrazine herbicides into weed management strategies brought a new era of preemergence weed control to the agricultural technology of citrus, sugarcane, sweet corn, and agronomic sod production, and other crops as well. Field work became less tedious, and higher yields were achieved. Simazine and atrazine are used alone and in combination with other herbicide products, for improved weed management and to get longer-lasting management of shallow germinating weeds. The triazine herbicides have low water solubility, low volatility, long residual activity, and they give a broad spectrum of annual weed control.

Use of simazine in permanent crops like citrus is essential to water conservation as well as for frost protection. Simazine also reduces the need to till in crops like citrus, which decreases soil erosion and helps protect perennial tree crops and their root systems from injury by tillage equipment. Simazine provides season-long suppression of annual broadleaf and vine weeds, and some grassy weeds. Important too is the fact that it is a crucial tool for herbicide resistant weed management.

Economically, the increased costs of alternative herbicides can range from approximately \$6 to \$40 or more per acre than for simazine, depending on the weed spectrum and the specific crop. Historically, simazine has been one of the most economical herbicides available to citrus growers. The large citrus grove acreages make labor-intensive mechanical weeding costly and totally impractical. Far-reaching tank mix compatibilities allows growers to combine simazine with post-emergent herbicides for broader weed control. Simazine's cost efficiencies have been especially important during the recent periods of low citrus returns, a time when growers needed low input cost/high efficacy weed management options.

With respect to simazine use in citrus, a typical application rate in citrus is usually 4 lbs. a.i./acre. Growers can apply this rate twice per year, once in the spring and once in the fall. Producers avoid use in the summer as a groundwater mitigation measure. Simazine, like all herbicide applications made to citrus crops, are banded and stopped at the dripline of the tree and at the end of the row. Young trees have narrower bands that may not be more than 25 percent of the grove acre. Typical mature tree bands are around 50 percent of the land area when trees are larger with typical row spacings.

Even though it can legally be applied twice, simazine is typically only applied once per crop to Florida citrus, either in the fall or in spring. Most applications are made in the fall. Until recently, simazine use in citrus has trended down because of the introduction of Alion Herbicide (indaziflam). However, weed management spectrum gaps (vines and other large seeded broadleaf weeds), concern about tree safety with Alion, enhanced broadleaf weed pressure because of thinning tree canopies resulting from Citrus Greening Disease (particularly the vine-type weeds), and overall economics have created a recent uptick in use and demand for simazine in citrus. Simazine provides a unique combination of proven tree safety, efficacy against problematic weeds such as vines and large-seeded broadleaf weeds, and it certainly provides favorable economics. Ease of use and grower familiarity with the product certainly add to simazine's utility in citrus as well.

FWS's draft BiOp indicates that more than 100,000 of acres of citrus are treated annually with simazine. These types of annual area treated numbers, combined with the lack of incidence data, further help to describe the overall value of the product, both to the user and to the environment (including endangered and threatened species).

The citrus industry in Florida only has simazine and one other alternative herbicide available to it from a broadleaf weed and vine management perspective. The other alternative broadleaf/vine herbicide is diuron. Having only two viable options available to it means that to effectively manage broadleaf and vine weeds, Florida's citrus

growers need continued, meaningful access to simazine as reflected by the current label use directions. Any registration changes or changes to current use parameters could vastly impact the citrus industry's broadleaf and vine weed management capabilities. Attempting to implement other/different herbicidal options into the citrus production system could also have the unintended consequence of impacting endangered/threatened species and/or impacting their critical habitats. With simazine's six decades of use and experience, everyone knows what they're getting, that being the availability of an efficacious herbicide that has a history of not negatively impacting endangered/threatened species or their habitats.

In sugarcane and sweet corn fields, atrazine can be banded between the rows, broadcasted over the entire field, or directed around the base of stalks away from leaves. Atrazine is arguably the most important component of the Florida sugarcane, sweet corn, and agronomic sod weed management programs and is one of the most widely used herbicides in these crop sectors because of its efficacy, affordability, flexibility of tank-mixing, safety to the crop, and its ability to provide residual weed control. The flexibility that atrazine provides allows these industries to manage all herbicides in the specialty crop portfolio more effectively. Like simazine, atrazine is also most often tank-mixed with other herbicides to broaden the weed control spectrum and increase residual control. It is a component of more than 90 different premix herbicide products. In these tank-mix applications, atrazine is applied at rates well below the full-labeled rate, often at  $\frac{1}{2}$  -  $\frac{1}{4}$  or less of the allowable maximum-labeled atrazine use rate. In addition to broadening the weed control spectrum, atrazine (even at reduced rates) often provides a positive synergistic effect when mixed with other herbicides, which in turn provides greater weed control than either product would as a stand-alone application. These tank mixes of atrazine with other labeled herbicides are also considered a key component of managing against the development of herbicide-resistant weeds.

The net return per acre of sugarcane is considerably less than many other specialty crops. This makes the availability of moderately priced herbicides such as atrazine very important to the sustainability of sugarcane production. Atrazine is often considered the backbone of Florida's sugarcane, sweet corn, and agronomic sod broadleaf weed management programs for multiple reasons, not the least of which is that it is inexpensive, and it is effective. In 2006, EPA estimated that losing atrazine would cost farmers an additional \$28 per acre for weed management. That number of course would be much higher today.



## **Risks and mitigations**

Florida already has strict regulations as well as multiple Best Management Practice (BMP) requirements in place to protect water bodies, groundwater, and endangered/threatened species, which limits herbicide use in certain areas. Florida's agricultural BMPs are guidelines advising producers how to manage the water, nutrients, and the pesticides they use to minimize agriculture's impact on the state's natural resources. These BMPs provide specific, research-based practices to agricultural producers, which reflects advancements in agricultural science, water quality research, and on-the-ground practices.

While the Endangered Species Act (ESA), the Herbicide Strategy, the Triazine Biological Evaluation, and the subsequent Triazine BiOp developmental processes have not been easy, the FWS and EPA commitment to conducting a comprehensive and thorough review of the science surrounding the perceived issues and non-target environmental impacts from the use of the triazines has led to a better, more realistic understanding of the impacts from the use of these compounds. As a result, a more appropriate Triazine BiOp assessment process can be developed. FFVA is encouraged by the dialogue and responsiveness evidenced throughout the regulatory system as the highly charged and complicated ESA/Herbicide Strategy/Biological Evaluation/BiOp activities have evolved over the past half-decade to ensure Florida growers can continue to effectively produce their crops, while also fully protecting species and critical habitats.

Many of the triazine label conservation measures voluntarily submitted by the registrants prior to the FWS consultations will advance the environmental safety profile of the triazines even further. Geographical footprint restrictions have already been agreed to as have spray drift conservation measures (ex., the use of ground application equipment only for simazine, with applications made at no more than four feet above the ground). Utilization of coarse droplet size nozzles are now required, as is the requirement that users must maintain a 15 foot in-field downwind buffer (in the direction in which the wind is blowing) from the edge of any streams and rivers.

Clarification is sought on one citrus-related classification point included throughout the draft Simazine BiOp. The statement of concern involves the 'citrus' wording presented throughout the document. Following 'citrus' notations, subsequent wording that appears specifically says, 'grapefruit, oranges, lemons'. Does this mean that these highlighted situations specifically apply only to grapefruit, oranges, and lemons? Or should this wording instead say something like "citrus, such as grapefruit, oranges, lemons"? Grapefruit, oranges, and lemons are in fact the representative crops for the citrus crop grouping 10-10 according to CFR 40 180.41. So when the 'citrus' wording appears, is the word 'citrus' meant to include grapefruit, oranges, and lemons only, or is it meant to also include other citrus crops such as tangerines, tangelos, pumelos, etc.?

These other crops included in the citrus crop grouping 10-10 need continued/similar access to simazine as well, so clarification as to what exactly is included by the term 'citrus' within the BiOp would be helpful.

### **Specific species and habitat impacts relating to the triazines**

The simazine BiOp says that FWS expects species to experience low levels of direct and indirect adverse effects because of 1) conservation measures already incorporated into the action that reduces potential offsite transport of simazine from spray drift or runoff, 2) lower overlaps with use sites and lower levels of past simazine usage, indicating only small numbers of individuals are likely to be exposed, and/or 3) low toxicological response to simazine. FWS subsequently writes in the simazine BiOp that they do not anticipate any species-level adverse effects and therefore, FWS does not anticipate that the registration of simazine will likely jeopardize the continued existence of these species. While that situation is anticipated for many species, a small number of individuals could experience reduced growth or reproduction or have a reduction in food sources. The BiOp goes on to say that FWS anticipates that simazine's use is not likely to jeopardize the continued existence of 665 of the 696 species considered. The FWS did note however that they believe there are 32 species that require further coordination before issuance of the final simazine BiOp. FWS has indicated that they will continue coordinating with EPA and the simazine registrants between the release of this draft BiOp and the transmission of the finalized BiOp to gain further information regarding the potential exposure and effects of each of these species to simazine.

Similarly, for atrazine, FWS does not anticipate that the registration of atrazine will likely jeopardize the continued existence of species. The atrazine BiOp says that FWS does not anticipate species-level adverse effects from atrazine's use for 502 of the 530 species considered. The FWS did note however that they believe there are 28 species that require further coordination before issuance of the final atrazine BiOp. FWS has indicated that they will continue coordinating with EPA and the atrazine registrants between the release of this draft BiOp and the transmission of the finalized BiOp to gain further information regarding the potential exposure and effects of each of these species to atrazine.

Comparable situations exist for both products with respect to critical habitats as well. For simazine, the BiOp covers designated or proposed critical habitats for 265 species. FWS does not anticipate that the registration of simazine will likely jeopardize, destroy, or adversely modify the continued existence of 252 of those proposed or designated critical habitats considered. While that is anticipated for these critical habitats, a small number of individual habitats could experience reduced growth or reproduction or have a reduction in food sources. The simazine BiOp goes on to say that FWS does not anticipate that this proposed action would adversely impact these critical habitats to a

level that would appreciably diminish the value of those critical habitats for the conservation of their respective species. It was the opinion of FWS that this proposed action for simazine is not likely to result in the destruction or adverse modification of these critical habitats. The FWS did note however that they believe there are 13 critical habitats that require further coordination before issuance of the final simazine BiOp. FWS has indicated that they will continue coordinating with EPA and the simazine registrants between the release of this draft BiOp and the transmission of the finalized BiOp to gain further information regarding the potential exposure and effects of each of these critical habitats to simazine.

For atrazine, the atrazine BiOp covers designated or proposed critical habitats for 195 species. FWS does not anticipate that the registration of atrazine will likely jeopardize, destroy, or adversely modify the continued existence of the 183 proposed or designated critical habitats considered. It was indicated that a small number of individual habitats could experience reduced growth or reproduction or have a reduction in food sources. The BiOp goes on to say that FWS does not anticipate that this proposed atrazine action would adversely impact these critical habitats to a level that would appreciably diminish the value of those critical habitats for the conservation of their respective species. The FWS did note however that they believe there are 12 critical habitats that require further coordination before issuance of the final atrazine BiOp. FWS has indicated that they will continue coordinating with EPA and the atrazine registrants between the release of this draft BiOp and the transmission of the finalized BiOp to gain further information regarding the potential exposure and effects of each of these critical habitats to atrazine.

### **Potential impacts from installation of Pesticide Use Limitation Areas (PULA)**

PULAs are designated areas that require extra rules and instruction when using a pesticide because of the presence of a species situation. The PULA could involve either the species itself or even a critical habitat for that species' survival. Florida has already been assigned numerous PULAs; in fact the entire coastline area of the state is now considered a PULA. This means Florida's pesticide applicators will need to pay particular attention to the PULA process and to all PULA designations.

Pesticide Use Limitation Areas do just that; they are limiting and will make it more challenging to successfully use pesticides in those areas. This can be concerning when extended geographical areas are designated as PULAs, as has already happened in Florida. According to "Bulletins Live! Two," entire counties in Florida are designated as PULAs in certain situations. One of these county-wide PULAs involves the county where most of the sugarcane and sweet corn production in the state occurs. This one county includes an area of 1,971 square miles. Sugarcane production alone covers about one-third of that county's overall landmass. So most of the sugarcane and sweet corn

production acreages in the state are already included in this one single PULA. Additionally, according to EPA's Vulnerable Species Lake Wales Ridge Plants publication, the state has individual geographical "ranges of concern" for species that in certain instances cover continuous areas more than 100 miles north/south in length and more than 50 miles east/west in width. So that one, single continuous geographical area of concern represents an area of approximately 5,000 square miles. This land is considered important to the persistence of certain species of plants within that area. Much of this ~5,000 square mile area however includes vast amounts of citrus production lands, so citrus growers could have fewer weed management options and opportunities because of what is imposed via these types of ranges of concern and PULAs, which will further complicate weed management strategies and approaches in crops such as citrus as well. Farmers in general will also find it harder to manage weeds effectively within and near any PULA boundaries, which could lead to greater risk of weed pressure spreading to these nearby groves. If farmers are limited in their access to herbicides such as simazine and atrazine, weed infestations may cause more damage and lower crop quality could reduce market values. PULA rules could necessitate changes such as extending buffer zones where no herbicide use is possible, growers having to purchase new precision spray equipment/technologies, and/or shifting application timings. These situations can complicate scheduling, increase economic challenges, and reduce operational efficiencies.

When herbicide uses are restricted, farmers may struggle to manage weed outbreaks, leading to lower yields and increased crop losses. Alternatives such as bioherbicides, which cost 2-3 times more than products such as the triazines, have essentially little to no efficacy in a subtropical growing environment such as Florida. Manual weed control methods are also more expensive and require more labor, which again increases production costs. Additionally, strict rules on spraying times, weather conditions, and buffer zones reduce the farmer's flexibility, making it difficult to respond quickly to fast-spreading broadleaf or vine weed outbreaks.

The general impact of PULAs will be that farmers will need to keep more records, adopt more conservation practices, and follow dynamic regulatory rules when making pesticide decisions. USDA has advised EPA that the cost of ESA compliance in three states alone (Illinois, Iowa, and Nebraska) could be as high as \$5.5 billion. PULAs aim to protect species, habitats and the environment, and they can help to encourage sustainable agriculture. However, they also bring economic and practical challenges for farmers, particularly in terms of weed management and production costs. Balancing environmental/species/habitat protection with farmer livelihoods remains essential for effective agricultural policy.

## **Conclusions**

For more than 60 years, the triazine class of herbicides have provided effective low-cost, long acting, sustainable, conservational appropriate weed management for farmers. The benefits to using atrazine and simazine can be better understood by reviewing the tens of thousands of public comments that have been submitted to EPA as a part of the triazine's reregistration, SAP, and Biological Evaluation processes. We fully believe that it is scientifically justified that growers retain meaningful access to the triazine herbicides as reflected by current label use directions. We also firmly believe sound science should continue to dictate these FWS ESA BiOp activities.

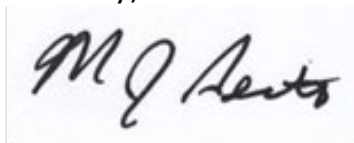
Simazine has played a major and long-standing role in the Florida citrus production industry. Atrazine has played a major and long-standing roll in the Florida sugarcane, sweet corn, and agronomic sod production industries. The importance of these herbicides, and why growers have historically relied on them, can be highlighted by the fact that simazine and atrazine provide reliable, environmentally safe, long-lasting weed management, and that they are very cost effective and easy to apply.

FFVA recognizes the tremendous amount of work that the triazine BiOp processes represent. It is our hope that the draft triazine BiOps will continue to experience meaningful refinements that will lead to the development of more effective regulatory programs. We will continue to monitor the implementation of these FWS triazine BiOp activities as well as the mitigation actions, PULA developments, and other label modifications that may be proposed.

FFVA is pleased to provide these comments and is encouraged by the strong commitment exhibited by FWS and EPA to the public process for these triazine compounds. We are supportive of FWS's and EPA's efforts to regulate crop protection chemicals based on sound science.

Florida's specialty crop growers need continued, meaningful access to the triazine herbicide products as reflected by the current label use directions. FFVA strongly endorses the registration preservation efforts associated with the triazine herbicide BiOps. If any additional information is needed or questions arise, please do not hesitate to contact us. Thank you in advance for your support with this situation.

Sincerely,

A handwritten signature in black ink, appearing to read "MJ Aerts", is enclosed within a thin black rectangular border.

Michael J. Aerts  
Vice President; Science and Regulatory Affairs