Elizabeth Hill
USDA Office of Pest Management Policy

Re: Questions regarding simazine usage

July 10, 2019

The following comments are submitted in response to USDA OPMP’s questions regarding the usage of simazine in nursery, orchard, vineyard, and berry crops. These comments are being submitted on behalf of the Western IPM Center, and provide input from Northwest commodities and university experts.

• Which weeds are typically targeted by simazine in nursery production?
  Simazine is not widely used in nursery production. If used, it is used against summer annuals and fall broadleaves and grasses, but mostly broadleaves in field grown nursery stock. Poa annua is a common target.
    o What application rate is typically used to target these pests?
      2 to 3 lbs/A
    o What are the alternatives to simazine for these pests?
      Alternatives include indaziflam, isoxaben (both expensive), pronamide (excessively expensive), and pendimethalin.
    o What are the advantages and disadvantages of simazine relative to the alternatives?
      Simazine is very cost effective, with moderate longevity in the soil.

• Is simazine applied by mechanically pressurized handguns in nursery ornamental production? No

• How typical are backpack sprayer applications of simazine to orchard/vineyards?

• How typical are applications of simazine with mechanically pressurized handguns to orchard/vineyards?
  Neither of these application methods are typical in orchards/vineyards in the Northwest. A typical backpack sprayer holds 3 gallons. This would involve a lot of labor to spray a 200 ft row. In non-cropping areas such as fence rows or parking lots, handguns or backpacks might sometimes be used attached to a sprayer in a truck, but not on orchard rows. If used in orchards, simazine would be applied by tractor with a boom sprayer. However, simazine is not commonly used in these crops.

• If applied this way, how many acres can one individual treat during a single day with a backpack?
Two acres a day at most.

- If applied this way, what is the typical application rate when applying with a backpack?  
  Most likely higher than it should be applied.

- How typical are applications of simazine with mechanically pressurized handguns to berries?  
  Application of simazine with a mechanically pressured hand gun is not at all common in blueberry, blackberry, loganberry, Boysenberry, raspberry or strawberry. Simazine is not used in cranberry.

Note: In berry and orchard crops, application of any pre-emergence/soil-active herbicide is not made with hand-held guns or spray booms; this is done via commercial sprayer with tractor.

Please let me know if you have questions or seek further information.

Respectfully,
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Katie Murray is Statewide IPM Coordinator for Oregon State University, and the Western IPM Center’s Northwest IPM Network Coordinator. Katie has expertise in agricultural stakeholder engagement and consultation methods that include understanding current pesticide usage trends, and pesticide compatibility with IPM.

The IPPC is the hub for Oregon’s statewide IPM program, and the main IPM resource in Oregon for farmers, researchers, and extension agents. The expertise represented in the IPPC is highly interdisciplinary and includes toxicology, entomology, horticulture, adult education, public health, and anthropology, all with an IPM focus. Within the IPPC, we have a collective expertise in understanding the use of pesticides within IPM programs with a goal of protecting the economic, environmental and human health interests of our stakeholders.
To compile comments, input is actively solicited from stakeholders throughout the Pacific Northwest in an effort to convey use patterns, benefits, potential impacts, and the availability and efficacy of alternatives. These comments largely reflect expert testimony from stakeholders, including research and extension experts as well as farmers and commodity groups. The comments do not imply endorsement by Oregon State University or the Western IPM Center.